DOCUMENT RESUME

ED 188 539 HE 012 830

AUTHOR Conrad, Clifton F.; Wyer, Jean C.
TITLE Liberal Education in Transition. AAHE-ERIC/Higher Education Research Report No. 3, 1980.
INSTITUTION American Association for Higher Education, Washington, D.C.; ERIC Clearinghouse on Higher Education, Washington, D.C.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE 80
CONTRACT 400-77-0073
NOTE 73p.
AVAILABLE FROM American Association for Higher Education, One Dupont Circle, Suite 780, Washington, DC 20036 ($3.00 members, $4.00 non-members).

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Academic Education; Core Curriculum; Curriculum Development; Educational Philosophy; *Educational Trends; Foundations of Education; Futures (of Society); *General Education; *Higher Education; *Humanities Instruction; *Liberal Arts; Models; Relevance (Education); Theories

ABSTRACT

The changing tradition of liberal education in America is examined against the backdrop of Greek, medieval, colonial American and German expressions of the liberal tradition and its necessary humanistic disciplines and pursuits. After a historical discussion of various manifestations of liberal education through the ages, recent strains of liberal education alternatives are reviewed. Seven major trends in liberal education during the 1970s are identified: the movement back to a required, integrated group of courses or experiences under a "core" curriculum; renewed interest in relating the outcomes of liberal education to curricular programs; redefinition of liberal education in terms of process and not simply content; a move away from the traditional exclusive emphasis on reason and intellect; a new focus on values or moral education; development of new relationships between the liberal arts and the professions; and redesigned curriculum structures such as degrees, credits, administrative structures and calendar arrangements. Given these particular educational trends, the recent models of Bergquist, Chance and Conrad are examined using criteria of content, process, and outcomes to isolate further trends in liberal education theory. Finally, distributive, integrative and competence-based models of liberal education are arrived at which subsume previous models and which offer new insights into future trends in the liberal tradition. A lengthy bibliography is appended. (DC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED188539

Liberal Education in Transition

Clifton F. Conrad and Jean C. Wyer

AAHE-ERIC/Higher Education
Research Report No. 3, 1980

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

HE 012 830

Prepared by
ERIC®
Clearinghouse on Higher Education
The George Washington University
Washington, D.C. 20036

Published by
AAHE
American Association for Higher Education
One Dupont Circle, Suite 780
Washington, D.C. 20036

This publication was prepared with funding from the National Institute of Education, U.S. Department of Education, under contract no. 400-77-0073. The opinions expressed in this report do not necessarily reflect the positions or policies of NIE or the Department.

Foreword

Liberal education was the foundation on which the early American colleges were built. While this foundation has been an important part of our higher education system, it has also been continuously changing in emphasis and ingredients. For example, the rise of science and technology added a new dimension to what was commonly considered a liberal education and the acceptance of the elective system made liberal education more amorphous. The demands for a "relevant" education during the latter part of the 1960's and in the 1970's gave support to the concept of career education and created a belief that liberal education and career education were not compatible.

The questions that now arise are, What do these pressures and competing forces mean for liberal education? and How does liberal education meet the demands of students of the 1980's and beyond? Answers to these questions require an understanding of the philosophic base for liberal education and a perspective on the changes that have occurred in the recent past to reinforce or alter this base.

In this monograph, Clifton F. Conrad, Associate Professor of Higher Education, and Jean C. Wyer, Assistant Professor of Business Administration at The College of William and Mary comprehensively review the literature that addresses these issues. They also analyze three models of liberal education and develop a rationale for the future of liberal studies. This monograph should be especially useful to institutions that are evaluating their curriculum and setting new goals for the coming decade.

Jonathan D. Fife
Director
ERIC® Clearinghouse on Higher Education

Research Reports

To subscribe to the Research Report series (10 issues starting from date of subscription), write to the Publications Department, American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036. The subscription rate for AAHE members is $25, for nonmembers $35. Payment must accompany all orders under $15. Single copies of 1979 and 1980 Research Reports—$3 for AAHE members, $4 for nonmembers. Bulk discounts available.

1979

1. Women in Academe: Steps to Greater Equality
   Judith Gappa and Barbara Uehling
2. Old Expectations, New Realities: The Academic Profession Revisited
   Carol Herrnstadt Shulman
3. Budgeting in Higher Education
   J. Kent Caruthers and Melvin Orwig
4. The Three "R's" of the Eighties: Reduction, Retrenchment, and Reallocation
   Kenneth P. Mortimer and Michael L. Tierney
5. Occupational Programs in Four-Year Colleges: Trends and Issues
   Dale F. Campbell and Andrew S. Korim
6. Evaluation and Development of Administrators
   Robert C. Nordvall
7. Academic Advising: Getting Us Through the Eighties
   Thomas J. Grites
8. Professional Evaluation in the Eighties: Challenges and Response
   Glenn F. Nyre and Kathryn C. Reilly
9. Adult Baccalaureate Programs
   Marilou Denbo Eldred and Catherine Marienau
10. Survival Through Interdependence: Assessing the Cost and Benefits of Interinstitutional Cooperation
    Lewis D. Patterson

1980

1. Federal Influence on Higher Education Curricula
   William V. Mayville
2. Program Evaluation
   Charles E. Feasley

Contents

Overview 1

Liberal Education: A Dynamic Tradition 4
The Classical and Medieval Background 4
The Liberal Arts in America 8

The Reexamination of Liberal Education: Legacy of the 1970's 19
Recent Literature on Liberal Education 19
Eclipse of the Liberal Arts 23
Trends in Liberal Education 25

Models of Liberal Education 36
The Anecdotal Approach 36
Models of Liberal Education: State of the Art 37
Models of Liberal Education in the Recent Literature 39
Three Models of Liberal Education 43
Trends in Liberal Education Models 49

Liberal Education: The Unifying Ideals 51
The Liberal Education Paradigm 52
A Vision of Liberal Education: The Future as History 56

Bibliography 59

Acknowledgements

We deeply appreciate the assistance of Roderic Owen, a doctoral candidate in higher education at The College of William and Mary. In a number of important ways, this monograph reflects his philosophical perspective and analytical insight. Robert T. Blackburn and Zelda Gamson, both of The University of Michigan, made helpful comments on the manuscript. Of course, we assume final responsibility for the report.

Overview

For over a decade, it has been argued that the liberal arts no longer liberate, that indeed the liberal tradition itself is either dying or dead. If the latter is true, the obituary will be hard to phrase, for the concept of liberal education is ambiguous. The equivocation in the concept often leads commentators to include more of their own personal views than would otherwise be acceptable in formal discussions. This paper acknowledges such a bias and recognizes that meaningful debate must begin with a clear conception of liberal education. Our conception of the liberal tradition encompasses the ultimate questions of society and the individual as well as the acquisition of "skills" and "knowledge."

The liberal tradition has its roots in the ancient Greek belief that education *is* culture and involves free choice, commitment, and the willingness to bear significant risks. For the Greeks, education was a personal and moral inquiry that blended theory with practice, the ideal with reality, and the freedom of the individual with the Good of the State. Though later transformed and expanded in different settings, Greek ideals and practices provided the foundation for a liberal arts education from the medieval university to the colonial American college.

Liberal education in the American college flourished through the colonial years, and with the bulwark of the Yale Report of 1828 it remained strong through the mid-nineteenth century. However, with the importation of the German university model, which stressed research and specialization, the significance of the liberal tradition in American higher education declined. By the mid-twentieth century, the majority of liberal arts programs developed their curricular characteristics far removed from the Greek conception of education: academic specialties, professional schools, and the immediate needs of society and the individual.

The breadth of the recent debate over liberal education reflects, at least in part, a confusion over the proper approach to the problem. On one side is an emerging body of scholarship regarding the college curriculum and liberal education. This approach includes (among other contributions) comprehensive handbooks, national surveys of curricular practices, and case studies of institutional innovations.

While most of the academic literature is largely descriptive, much of the recent scholarship includes an analytical component.

A second approach comprises largely prescriptive proposals for change and reform in liberal education. Some reformers reassert the humanistic vision grounded in knowledge of our Western culture; some emphasize broad developmental goals transcending the formal curriculum; and others propose learning experiences based on modes of knowing and higher-order intellectual skills. But whatever their perspective, these proponents debate passionately the merits of differing visions.

Combined with these pleas for change, the numerous forces that affect the process of curricular design have precipitated curricular movement in many directions. Among the resulting trends are an increase in prescription and integration and an emphasis on process and outcomes rather than on the often single-minded concentration on the transmission of subject matter. Interest in the assumptions underlying liberal learning has led to an expansion of the concept of reason and an increased concern over the role of values in the curriculum. External pressures—the rise in enrollments during the 1960's and a concomitant change in student preferences—have led to changes in the structure of the curriculum and a search for a new relationship between professional and liberal education. While these trends reflect a revitalized concern for liberal education, their diversity brings into question the idea that a consensus can be developed on a single model of liberal education.

Reflecting the rich diversity of approaches to curriculum innovation, an anecdotal approach has been the primary vehicle for the scholarly development of alternative models of liberal education. This approach has several drawbacks, including an analytical laxity that has pervaded existing typologies of liberal education models. Nevertheless, several current models of liberal education—by Bergquist, Chance, and Conrad—bear close examination, for they provide a useful point of departure for discussion. The three comprehensive models most commonly adopted are: the distributive model—the model most frequently used, and the one embodied in the new curriculum at Harvard; the integrative model, as used in the Integrated Studies Program at Pacific Lutheran University; and the competence-based model, as found at Brigham Young University.

This brief overview provides the framework for the paper. The first chapter embraces a concept of liberal education that is seen through a historical lens. The following chapter examines the schol-

arly literature and discusses recent trends; the third chapter discusses and compares several attempts to demarcate models of liberal education, and identifies, develops, and provides examples of three models of liberal education.

It should be noted that our purpose throughout has been more than to simply identify and discuss the literature on liberal education. Rather, we have reviewed existing data and research with an eye toward integrating it into a conceptual whole. In a phrase, we have attempted to be consistently analytical, illuminating what is significant and important rather than lapsing into a descriptive portrait of recent developments in liberal education.

We take the opportunity in the last section of the paper to present our vision for the future of liberal education. Attacking the current liberal education paradigm, we argue for a "connected view" of liberal education that has much in common with Greek conceptions of liberal education. Thus, with this reference to the Greeks, we have come full circle. At the least we provide a firm basis for enriching the quality of the public dialogue over the present and future of the liberal tradition in transition.

Liberal Education: A Dynamic Tradition

Liberal education is a difficult concept to define. It is ambiguous in both theory and practice. Its numerous synonyms and related terms have given it a normative status in our educational lexicon. Thus, more often than not, historical accounts of liberal education, as well as the myriad of prescriptive treatises and value-laden apologias about it, are frequently more of a revelation of their authors' personal philosophy than an exposition on the nature of liberal education itself. This study differs only in our acknowledgment of such preliminary biases and our recognition that if there is to be important and lively debate, a clear concept of liberal education is necessary.

This overview points to a potent, rich, "liberal" tradition that encompasses more than the acquisition of skills and knowledge per se. It defines a tradition of liberal education that speaks to the ultimate questions of society and the individual. The first section looks at the European roots of liberal education while the second examines the development of the liberal arts in American colleges and universities.

The Classical and Medieval Background

The various expressions "liberal disciplines," "liberal arts," "liberal studies" and their contemporary counterpart, "liberal education," have historical referents more numerous than even their names imply. The liberal disciplines among the Romans were a form of the Greek *enkuklios paideia*, which consisted of instruction in the basic literacy skills—both verbal and quantitative (Levine 1978, p. 492). The liberal arts of the Middle Ages consisted of the split between the *trivium* (grammar, rhetoric, and logic) and the *quadrivium* (arithmetic, geometry, astronomy, and music). However, it was the *trivium*, particularly logic, that dominated scholarly inquiry throughout the Middle Ages (Schachner 1962, p. 14). Liberal studies as they emerged during the Renaissance were the secular component of an education that seriously attempted to link learning with conduct in the effort to create a virtuous and noble man. Throughout the history of education, there also have been those who regarded the liberal arts as a fixed, immutable body of knowledge, subject neither to question nor criticism.

In twentieth-century America, liberal education often is used synonymously with general education, referring to that part of one's

studies that lies outside the chosen area of vocational or academic specialization. More affirmatively, it sometimes refers to the curricular component that introduces students to a common cultural heritage and the seminal creations of civilization. Still others regard liberal education as an antiquated remnant from an elitist society that provides cultural refinement and little else. Most recently it has been identified as a *process* through which the "whole person" is developed, and also as a type of cognitive immersion in fundamental ways of knowing and in advanced intellectual reasoning skills (Levine 1978, pp. 3-4). Our contemporary confusion over the idea of liberal education makes a historical analysis a necessary as well as difficult task.

Liberal education—its formal ideals and its practice—has changed dramatically over the 2,500-year history of Western civilization. Still, to a degree unknown to other forms of education and training, liberal education has been solidly rooted in a cultural ideal that first emerged among the Greeks in the fifth century B.C. This account will trace the historical development of that ideal before returning to examine its Greek origins in more detail.

In the first century B.C., the erudite Roman scholar, Varro (116-27 B.C.), wrote what is regarded as the first encyclopedic work on the liberal arts; his *Disciplinarum libri novum* is one of the earliest known usages of "liberal" in conjunction with education and knowledge (Boyd 1966, p. 69). Four hundred years later Martianus Capella (c. 424), a lawyer and rhetorician, wrote *De Nuptiis Philogiae et Mercurii et de Septem Artius Liberalibus Novem,* an immensely popular work which practically became dogma during the Middle Ages (Schachner 1962, pp. 13-14; Boyd 1966, p. 94). Within a century and a half, Cassiodorus (c. 490-585) gave all-important scriptural sanction to seven liberal arts. As Abelson notes, it was during this time that church leaders admitted the necessity of "incorporating secular studies into the Christian curriculum, and since the secular studies had been definitely seven in number for over a century and a half, reasons were found from a Christian standpoint explaining scripturally that their number seven was divinely sanctioned" (1906, p. 9). Thus, with Cassiodorus, the subjects of the medieval curriculum were limited in scope and number, and the idea of learning and knowledge outside the domain of theology and Scripture was kept alive.

However, a comfortable balance did not emerge between Christian precepts and the liberal arts until 800 years later. Pietro Paolo Vegerio's (1349-1420) treatise, "On the Manners of a Gentleman and on Liberal Studies," was an influential early Renaissance work that

helped bring about several changes. Vergerio insisted on the value of an all-round education, the primacy of morality over learning, and the need to stretch the liberal arts to include literature, history, and "knowledge of nature" (Boyd 1966, pp. 163-164).

By the end of the thirteenth century, the major medieval universities had been formed—Paris, Bologna, Oxford, and Cambridge—along with at least 80 others (Haskins 1957, p. 20). During this period the three original professions of law, medicine, and theology were incorporated into the university curriculum—although their study could not be undertaken until the student was well grounded in the liberal arts. This general education for the man of affairs was an integral part of a university education. The liberal arts were transformed from a narrow epistemic construct, allowing merely for the survival of knowledge and scholarly inquiry, into a dynamic cultural ideal thriving in a new setting, the university, and, more generally, flourishing in an age of discovery and rebirth. Indeed, as our historical label for this era implies, this was a period of rebirth—a renaissance of classical knowledge and values.

The "new" knowledge incorporated into the liberal arts was actually regained knowledge, regained *through* the Spice Routes and Islamic culture but *from* the ancient Greeks, particularly Aristotle. To a large extent, it was this injection of Greek thought into medieval Europe that set human civilization on a course out of the Dark Ages. Even in our own time, such prominent educational leaders and theorists as Mortimer Alder, Mark Van Doren, and Robert Hutchins have espoused a perennial philosophy of education that embraces the ideals of classical culture. Indeed, it was the Greek emphasis on our common humanity—as a means to create both personal and public excellence—that has made the liberal arts ideal so tenacious and potent a force.

In his classic study of Greek education, Werner Jaeger maintains that "the structure of every society is based on the written or unwritten laws which bind its members. Therefore, education in any human community . . . is the direct expression of its active awareness of a standard" (1939, p. xiv). Fortunately for us, the Greeks were supremely aware of their ideals, and they worked hard to achieve them. The ideal of a liberal education, if not its etymological root, was captured by the Greeks in two concepts: *paideia* and *areté*. *Paideia* meant education, or more broadly, culture, and in practice it was inextricably linked to *areté*, the ability to live one's life well, and the knowledge of what it is to be human (Drew 1978, p 304). The

Greeks earnestly sought an answer to the question, "What type of *paideia* leads to *areté*?" Their answer took the form of what we now refer to as liberal education.

Within the relatively short history of ancient classical Greece, the ultimate aim of education developed from an ideal of man as the mentally courageous and physically fit warrior, to the responsible citizen immersed in the civic affairs and artistic creations of society, to the reflective individual engaged in *eudaimonia*, the rational contemplation of the highest ideas and ideals (Jaeger 1939, p. 6). *Areté*, the strived-for ideal in Greek society, was far from impractical, since it involved all three aims of this historically developed ideal. *Eudaimonia*, the highest form of *areté* as conceived by Aristotle, was never meant to supplant the other forms of *areté* but rather to illuminate their role and significance within a broader context. It was considered the highest and most uniquely human art of thinking, the most noble use of leisure. Perhaps Lewis Mumford expresses the point most effectively as he addresses our own time and situation:

> In fact, without leisure, our expansion in industry would be almost meaningless; for we need a plentitude of time if we are to select and assimilate all the genuine goods that modern man now commands. *Schola* means leisure; and leisure makes possible the school. The promise of a life economy is to provide schooling for the fullest kind of human growth—not for the further expansion of the machine (1979, p. 456).

In the very act of seeking *areté* the Greeks created a culture that became an educative force.

In an article dealing with the Greek ideals of liberal education, Murchland writes, "The endless quest for definitions and intellectual clarity was not empty verbalizing or mere intellectual gamesmanship. It was based on their belief that practice and theory were interdependent, two aspects of a unified moral activity" (1976, p. 23). Liberal education, then, was metaphysically grounded in this unique conception of an education that *is* culture and not simply *about* culture or the transmission of culture and knowledge. Furthermore, education for *areté* was a moral activity; it was not moral in a narrow religious context but rather in the sense that there was something vital at stake, an idea or situation that demanded free choice and commitment along with a concomitant willingness to bear grave risks. And ultimately for the ancient Greeks, the very life and health of each individual and society as a whole was at stake. Within such an intense context, then, the Socratic maxim "know theyself" was, funda-

mentally, a personal and moral inquiry . . . but not a private one (the opposite of personal is impersonal). This blend of personal excellence with the public good was dramatically embodied in *areté*. To know one's self was to know what it is to be a human being.

This brief sketch, of course, offers an understanding of liberal education at odds with those who have characterized such education as highly theoretical and esoteric, elitist, or even frivolous. Certainly, it is true that if there has been any form of education that has treasured the pursuit of knowledge for its own sake, it has been liberal education; but rarely, if ever, have its great advocates claimed knowledge as an end in itself, as the ultimate aim of education. Murchland (1979, p. 47) identifies this ivory-tower interpretation as a fairly recent phenomenon and in reference to liberal education writes, "Pure reason has no place in this tradition for there is no use of reason that does not have some emotive base and some moral payoff. This conviction was the cornerstone of Greek and medieval philosophers of education" (1976, p. 23).

Almost all contemporary proponents of liberal or general education have sought to nullify the vision of liberal education as impractical, usually through emphasizing the sustaining link between a democratic society and its educational structures (Drew 1978; Harvard Committee 1945; Hutchins 1936; Van Doren 1959) and through advocating the role of liberal education in developing a fully human individual (Chickering 1969; McGrath 1976; Murchland 1976, 1979). At some point, many proponents refer to the Greek example and attempt to show its relevance for contemporary American society and the individual.

In summary, Greek education was primarily a moral enterprise that attempted to bind together theory with practice, the ideal with reality, and the freedom of the individual with the Good of the State. It provided an ideal for education flexible enough to adjust to changing times and societies but also concrete enough to remain potent for almost 2,500 years. With this conception of liberal education solidly rooted in the thought and practice of classical Greece, we turn now to the United States to trace its historical development on a new continent.

The Liberal Arts in America

Most historians of higher education in this country identify three broad historical periods and align their accounts accordingly (Brubacher and Rudy 1976; Rudolph 1962; Schmidt 1957). The first period

(from roughly 1636 to 1828) saw the transplantation of the seventeenth-century English and Scottish universities, with their classical curriculum packaged in a theological framework. The early colleges were adapted first to the needs of the fledgling colonies and later to the requirements of an emerging nation. The second period (1828-1862) was characterized by the birth of the modern university and marked by its clashes with the sectarian entrenchment of the traditional liberal arts schools. The third period began with the Morrill Act of 1862 and was quickly followed by the widespread implementation of the German university model emphasizing research and specialization. During these years the liberal arts as a distinct tradition declined in educational significance. Our close historical proximity and contemporary confusion over the goals and mission of higher education have worked to halt the definitive identification of a fourth period emerging in the late twentieth century.

As an institutional type and as a curricular component, liberal education flourished in the two earlier periods but declined dramatically in educational significance and impact with the rise of the comprehensive university. Indeed, the failure of the liberal arts schools to adjust effectively to the changing pressures and needs of an expanding society is, at least in part, the explanation for their own decline and the immense success of more versatile and open forms of higher education. It is also one fundamental cause of our contemporary divisions between vocational and theoretical, research university and liberal arts college, and even between the sciences and the humanities. By the mid-twentieth century, the status quo lay firmly within the multi-purpose, multi-mission universities; and the majority of liberal arts colleges and university undergraduate programs derived their actual curricular offerings, if not their educational rhetoric, from the academic specialists, the professional schools, the immediate needs of society, or some combination of the three.

Throughout most of this century there have been attempts to revitalize liberal education and purposively illustrate its relationship to society and to the other forms of higher education—be they professional, vocational, or disciplinary specialization. However, as Mumford pointed out almost 50 years ago, "We have still to build up a satisfactory equivalent for the old classic curriculum" (1979, p. 96). This has remained true through the 1970's. Moreover, one can no longer assume, on philosophical grounds, that any sort of consensus on liberal education can actually be achieved.

During the colonial period and into the nineteenth century the

liberal arts institutions did adjust to their new environment. The transplantation of the classical curriculum occurred initially in 1636 with the founding of Harvard, followed by William and Mary in 1693 and Yale in 1701. All three were governed by lay boards and, although their fundamental mission included the training of clergymen, none required specific doctrinal examinations of either their entering or graduating students (Brubacher and Rudy 1976, p. 8).

Furthermore, and again unlike their European counterparts, the colonial colleges were organized and supported through three disparate sources: religious groups, private philanthropy and, especially, state and local government (Schmidt 1957, p. 33). The scarcity of students, monies, and scholars; the lack of "New World" traditions and cultural precedents; and the nurtured Enlightenment ideals of religious toleration and democratic governance worked together to create all of these changes in the noncurricular aspects of higher education. In comparison, the curricular innovations were, at first, relatively minor. The *trivium* and *quadrivium* and the emphasis on Greek and Latin rarely were tampered with until after the Revolutionary War.

The Protestant denominations had pervasive influence and, to a degree based upon denominational type and geographical area, their doctrines and rules blended with the Greek-rooted classical studies. Even in these early colonial colleges with rigidly prescribed courses of study, constant recitation, scholastic disputations, and stern moral exhortations there was change. The liberal arts were expanded to include at least an introduction to moral and natural philosophy (essentially, these were the progenitors of the social and natural sciences, respectively) as well as separate courses in mathematics and ancient history. A moral philosophy course, usually taught by the college president, often served as a capstone to the college experience. This was a particularly intriguing element in the early colonial liberal arts curriculum, which has experienced something of a contemporary rebirth in the form of senior seminars. The moral philosophy course of the eighteenth century was unique, however, not for its elaborate attempts to unify knowledge but rather in its view of reason as free from theological domination and the medieval scholastic mode of inquiry (Earnest 1953, pp. 28-29).

By the end of the eighteenth century, innovation in higher education was establishing some momentum. The curriculum was continuously being stretched beyond the original seven liberal arts. This was partly an attempt to meet the needs of a growing frontier nation; but perhaps more significantly, curricular expansion was in accordance

with the growing role of intellectual inquiry and the rapid expansion of knowledge that marked the Enlightenment of Western Europe in general.

One of the first serious attempts to enlarge the classical curriculum occurred in the booming commercial center of Philadelphia, where Benjamin Franklin and the Reverend William Smith worked together to create the College of Philadelphia (later the University of Pennsylvania). Latin and Greek were discontinued after the first year of study; under the rubric of moral and natural philosophy, many modern-day subjects such as history, politics, trade and commerce, physics, and zoology were taught; and rhetoric and literary criticism were emphasized at the expense of grammar and syntax. In the following century, the newly created state universities (Georgia, 1785; North Carolina, 1789; Vermont, 1789; South Carolina, 1801; and Ohio University, 1804) followed Philadelphia's example, avoiding the limitations of the unitary, four-year classical plan of study under sectarian sponsorship. The progressive forces were determined to make American education less sectarian (if not less religious) and more scientific, practical, and general (Hofstadter and Smith 1961, p. 148).

In 1779 Thomas Jefferson had attempted similar reforms at The College of William and Mary with partial success. But it was over a quarter of a century later with the opening of the University of Virginia that a truly nonsectarian, publicly-controlled, Enlightenment-inspired institution was born. The University of Virginia had eight academic departments with rotating chairmanships, elective freedom, a diminished emphasis on the dominant *in loco parentis* outlook, imported European scholars, and equal respect for the sciences as well as the traditional liberal arts. Indeed, Jefferson's University of Virginia marks a peak in education reform, in sharp contrast to the well-known Yale Report of 1828.

The Yale Report was more than a local proclamation issued by President Jeremiah Day and Professor James Kingsley; it was the first unified American statement of educational philosophy that was concerned specifically with the nature of liberal education. Until its pronouncement, the numerous educational innovations—from the gradual introduction of the natural sciences to the deemphasis of Latin and Greek—were regarded as changes occurring among institutions of liberal learning. The Reverend Smith's proposal for the College of Philadelphia was entitled, "A Scheme of Liberal Education." Thomas Jefferson spoke of providing a liberal education at the University of Virginia (Hofstadter and Smith 1961, p. 175). And

Benjamin Rush, a noted proponent for academic change in his day, still referred to higher education as a "liberal or learned education" in 1798 (Hofstadter and Smith 1961, p. 172). By the 1820's, however, this conception of liberal education began to change. Liberal education began to be associated with the antiquated classical curriculum, sectarianism, and *in loco parentis*—rather than regarded as an educational ideal or even simply as a synonym for higher education, as had often been the case.

Almost a decade before the Yale Report, Daniel Webster had argued the Dartmouth College Case before the United States Supreme Court. The outcome of this landmark case delineated the distinguishing legal features between public and private institutions and, like the Yale Report, it was a victory for conservative forces. It meant that private colleges could be initially granted charters from the government and then remain free of governmental control. These two events became effective barriers against the advancing democratic forces pressing for control of higher education and more radical curricular reform. Neither their private status nor their conservative philosophy endeared the private liberal arts college to the larger public. The Yale Report was at odds with the general temper and mood of Jacksonian democracy and to many, then and now, it was a shockingly reactionary statement.

Essentially, the Yale Report was a reaffirmation of the medieval course of studies. The Report spoke of mental "discipline" and supplying the mind with "furniture" or knowledge; and it soundly rejected the appropriateness of any form of professional or vocational education within the undergraduate college experience. Rather, students were expected to develop "mental power which would be transferred at will from one study to another and from studies in general to the occupations of life" (Brubacher and Rudy 1976, p. 289). This mental rigor was equated with self-denial and strength of character and with moral righteousness itself. Yet ironically, an attitude of paternalism and authoritarianism dominated Yale and the hundreds of small, denominational liberal arts colleges that adhered to the principles and guidelines outlined in the Report. One had to search outside the domain of mental discipline and moral piety to discover educational institutions that respected their students as mature, individual young adults.

Jeremiah Day and James Kingsley had stressed that the rationale underlying the Report was the development of mental discipline. Later in the century, President Porter of Yale claimed (much as

Cardinal Newman had in his essays on university education in 1853) that liberal education was an end in itself, intrinsically superior to practical studies. However, embedded in the Yale Report itself lay yet another, more abiding rationale that went, essentially, unconsidered until the twentieth century; that was the idea of the development of the whole man:

> The great object of a collegiate education . . . is to give that expansion and balance of the mental powers, those liberal and comprehensive views, and those fine proportions of character, which are not found in him whose ideas are always confined to one particular channel (Hofstadter and Smith 1961, p. 282).

But whatever the rationale, liberal education as defined and defended by President Jeremiah Day and his faculty was considered by many as aristocratic, unnecessarily rigid, irrelevant and, moreover, based on an erroneous faculty psychology of "mental discipline." Yale, however, along with some of the other older, denominational schools, had felt threatened by the new programs of instruction and so the boundaries were laid between college and universities, liberal studies and sciences. The numerous sectarian private colleges—with their odd juxtaposition of classical learning and fervent Protestantism in a rugged frontier setting—prospered and, in the meantime, Yale became known as the "Mother of Colleges."

Several years before the Yale Report, Edward Everett and George Ticknor left Harvard for advanced study in Germany. Over the next one hundred years, more than nine thousand American students followed their example (Blackman 1969, p. 523). Many of these students returned with new Ph.D.'s; more significantly, however, they returned with the German idea of a university education and a determination to implant those methods and ideals in American higher education. The concepts of *lernfreiheit* (the German equivalent to elective freedom, based on the assumption of "student as mature adult") and *lehrfreiheit* (the Old World predecessor to academic freedom and, implicitly, the beginnings of a truly professional status for the professor) were introduced, along with the research orientation, the advocacy of theoretical science, and the emphasis on advanced disciplinary specialization. By 1825 several changes in these directions had been taken by the Board of Trustees at Harvard; and although many of these reforms were temporarily forestalled by a negative faculty reaction, the foundation for change had been laid.

In many established schools the new methods and subjects of study, falling outside the purview of the traditional liberal arts, were

either incorporated into the academic curriculum as a "parallel course of study" or slowly merged into the traditional curriculum (Rudolph 1962, pp. 114-115). The newly-established institutions, on the other hand, were far less hesitant to grant technical studies full status as Rensselaer did in 1824, the Union College of Engineering in 1845, and later Cornell in 1868. In the spirit of Jacksonian democracy the American public was demanding vocationally-oriented programs, and most employers felt that colleges should offer more practical training to match the nation's growing industrial needs (Conrad 1978b, p. 49).

The Yale Report only briefly slowed this trend, acting as an ideological barrier by segregating the smaller, denominational colleges with their static vision of liberal education from the larger, newer universities. The universities offered more practical training in the spirit of American pragmatism as well as advanced study adopted from the example of German scientific research.

One commentator claims that, "The most important single event in the gradual unfolding of the curriculum from the general-liberal to the utilitarian-vocational was the Morrill Act (Land Grant Act) of 1862" (Conrad 1978b, p. 50). Whether or not it was the most important event, there can be no doubt that the Act greatly fortified the trend already under way. Yale had by 1854 instituted a parallel course of study with the creation of what would later be named the Sheffield Scientific School. The Morrill Act established state institutions of higher education supported by endowments of land from the federal government. It specified that agriculture and engineering and other technical areas of study form the major part of the curriculum. However, it was almost as an afterthought that the following clause was added to the Act: "without excluding other scientific and classical studies." Indeed, if anything, the early land-grant university still tended to imitate its classical prodecessors, much to the chagrin of the pragmatic American farmer (Brubacher and Rudy 1976, p. 63). Eventually, however, the Morrill Act, along with the birth of the graduate school (John Hopkins University in 1876) and the growth of the elective system (by the end of the nineteenth century Harvard students had almost complete elective freedom), worked to create the modern university.

These were important historical developments for liberal education. The inclusion of graduate research and study and undergraduate education within the same institution dealt a severe blow to liberal studies. Because a separate graduate faculty was rarely established at the universities, the same instructor often taught students ranging

from freshmen to doctoral candidates. Moreover, the institutional framework often rewarded research and disciplinary specialization, not freshmen advising or undergraduate instruction, and particularly not general studies and interdisciplinary instruction. The dramatic increase in elective freedom was, undoubtedly, a healthy reaction against the antiquated, lockstep classical curriculum; but in its excesses it, too, served to weaken the ideal of liberal education as a total, integrated experience. Indeed, many of the undergraduate schools within the comprehensive universities became preparatory schools for the professions and the graduate departments. Liberal education, regarded as the ideal of higher education in the eighteenth century and as a major institutional form of higher education in the nineteenth century, had become regarded, by the turn of the century, in an even more limited sense as one component, sometimes a minor component, of the undergraduate curriculum. The broader classical nuances seemed either abandoned or forgotten.

The election of A. Lawrence Lowell as President of Harvard in 1909 marked the beginning of a reaction against elective freedom, overspecialization, and the lack of educational unity within the undergraduate curriculum. As Lowell saw it, the ideal college

> . . . ought to produce, not defective specialists but men intellectually well-rounded, of wide sympathies and unfettered judgments. At the same time they ought to be trained for hard and accurate thought, and this will not come merely by surveying the elementary principles of many subjects. It requires mastery of something, acquired by continuous application" (in Schmidt 1957, p. 209).

Lowell's rebellion against the distintegration of the intellectual core to the undergraduate experience found support in various, and sometimes unexpected, quarters throughout the twentieth century.

Of course, the ideal of liberal education as the creation of mentally and morally disciplined gentlemen via the lockstep classical curriculum was in force among the small, denominational liberal arts colleges well into the twentieth century. Many of this century's reformers, however, have sought new foundations and new curricular structures in their attempt to reintegrate the ideals of liberal education with the realities of contemporary society. Irving Babbit and Norman Foerster were leading humanists of the early 1900's who, along with their counterparts within higher education, rebelled against the banality of pragmatism and the methodological stranglehold of the sciences. Their cause for "liberal culture" and against specialization supported the ideal of the well-rounded man who was

well-acquainted with the standards of past civilizations (Veysey 1965, pp. 180-251). John Dewey and his "progressive" followers offered a philosophy of education based on the nature and needs of a modern, democratic industrial society. The curriculum was to be based upon the principle of problem-solving, and experience would precede the trappings of departmentalism and the vacuity of pure theory. Flexibility and diversity, the concepts of fluidity and change, were predominant (Dewey 1967). Following in the tradition of Cardinal Newman, Robert Hutchins placed emphasis on the Great Books and tradition, as well as the prevailing uniformity and power of human reason. His ideal curriculum would reveal underlying values and transmit the enduring truths of our Western intellectual heritage (Hutchins 1936).

The visions of these three philosophies of higher education shaped the nature of curricular reform and, although the Great Books program at St. John's College is an almost exact construct of Hutchins' ideals, most attempts at reform in liberal education drew from some mixture of these philosophical positions. They found expression in such schemes of general education as the contemporary civilization courses at Columbia University beginning in 1919, collegiate education at Meiklejohn's Experimental College at the University of Wisconsin, Morgan's experiential education at Antioch in Ohio, and Aydelotte's honors and independent study at Swarthmore in 1921.

The years immediately following World War II and the publication of Harvard's report, *General Education in a Free Society* (Harvard Committee 1945), saw yet another surge of interest in liberal education. Although the Harvard report used the expression "general education," attempting to avoid the lingering elitist connotations of the liberal arts (and undoubtedly in reaction to the continuing push toward "special" or "specialized" education), the report was a vital reaffirmation of faith in the utility and educational force of liberal education. According to the Harvard report, "The task of modern democracy is to preserve the ancient ideal of liberal education and to extend it as far as possible to all the members of the community" (Harvard Committee 1945, p. 53). The report concludes that what is necessary is a "general education capable at once of taking on many different forms and yet of representing in all its forms the common knowledge and the common values on which a free society depends" (p. 53). As Frederick Rudolph points out in his history of the American undergraduate curriculum, however, the report failed in its attempt to reinvigorate the curriculum. It was regarded by many as too

conformist or too authoritarian; by most, it was regarded as unrealistic in its high expectations of faculty cooperation and interdisciplinary instruction (Rudolph 1977, pp. 262-264).

By the 1960's any revitalization of liberal or general studies inspired by the twentieth-century Harvard descendant of the Yale Report seemed entirely dissipated within the virtual free-for-all of the distribution approach. In turn, liberal education was in disarray. The philosophy of objective, value-free knowledge had lost its purgative quality and iconoclastic stance of the nineteenth century, and by the mid-twentieth century had become as dogmatic and as unmindful of its own presumptions and values as had its theological and idealist predecessors. This narrow concept of the scientific method, often coupled with a broad application, seriously undermined the Greek tradition of liberal education. In addition, two distinguishing characteristics of American higher education—the uncoordinated diversity of curricula and institutional missions and the corporate structure of administration and governance—seemed antithetical or, at best, indifferent to liberal studies.

However, two other features, clearly demarcating American higher education from its global counterparts, have supported liberal education. The extracurricular emphasis and its modern institutional embodiment, student personnel services, have served since the colonial period to expand the mission and influence of college beyond the purely academic or vocational. In addition, the very persistence of the belief in, and attempted practice of, general and liberal studies in a higher education setting is almost uniquely American. Other nations have focused on professional education and academic specialization, claiming either that they have provided general education in the secondary schools or that they do not have the necessary economic resources to support programs and institutions of liberal studies. However, in the United States liberal education continues to be a more widely discussed, problematic concept.

Yet another feature of American colleges and universities, the radical expansion of opportunity and the resulting plurality of students, raises a challenge for the future of liberal education. The ongoing vitality of the liberal education ideal may well rely most heavily on its ability to adjust to a society seeking higher education for all its citizens. Liberal education as an institutional type still maintains an uneasy balance between its expectation of "quality" incoming students and its desire for an enriching, diverse student body. What areas of liberal or general studies can or should be stressed for a pluralistic

student body is open for debate. During the 1970's these tensions remained unresolved as the final vestiges of the classic liberal arts curriculum disappeared. We have yet to witness the emergence of some definitive model of liberal education that embodies the Greek ideals, bringing into closer association those ideals and the practice of liberal education.

The Reexamination of Liberal Education: Legacy of the 1970's

For over a decade, various commentators have argued that the liberal arts no longer liberate, that indeed the liberal tradition itself is either dying or dead. The recent concern with liberal education has spawned two major threads of literature that have helped both to describe and define the debate over liberal education. One of these strands consists of an emerging body of scholarship regarding the college curriculum and liberal education. In sharp contrast, the other is largely prescriptive, composed of various proposals for change and reform in liberal education.

The first section of this chapter reviews the recent scholarship, while the second section examines the range of proposals for change within the context of the debate over the status and future of liberal education. The third, and final section identifies emerging trends in liberal education.

Recent Literature on Liberal Education

Within the last decade, six separate beams of scholarship have focused on the topic of undergraduate curriculum, with much of the emphasis placed on liberal education. One approach has been an anthology of essays, a collection of views from prominent spokespersons or specialists providing a state-of-the-art summary. Sponsored by the Carnegie Foundation for the Advancement of Teaching, *Missions of the College Curriculum* (1977) is perhaps the most well-known of these anthologies. This book considers the influences that determine the shape of the curriculum, provides a base of curriculum information, presents views on major curricular issues, and makes suggestions for change. Another resource guide, *General Education: Issues and Resources* (The Project on General Education Models 1980), is made up of essays on seven general education topics and includes extensive annotated bibliographies as well as lists of resource organizations and individuals. Other examples of this approach include Hook, Kurtz, and Todorovich (1975), Kaysen (1973), and the winter 1974-75 edition of *Daedalus*. That these anthologies have become a major method of dealing with the complexity of the curriculum and liberal education is evidenced in the increased number of anthologies in particular

content areas. For example, recent anthologies have appeared on experiential learning (Keeton et al. 1976), competence-based liberal education (Grant et al. 1979), and interdisciplinarity (Kockelmans 1979).

A second approach, following the lead of Dressel (1971) and Mayhew and Ford (1973), is the comprehensive handbook aimed at providing an integrated resource for curriculum planners and students of the curriculum. Levine's *Handbook on Undergraduate Curriculum* (1978) was aided by the resources of the Carnegie Council on Policy Studies in Higher Education. *Developing the College Curriculum* (Chickering et al. 1977), while less encyclopedic than the Levine volume, is another resource on curricular rationale, design, models, and implementation. Finally, *The Undergraduate Curriculum* (Conrad 1978b) focuses on major issues, trends, and innovations in undergraduate education within the context of a framework for curriculum planning. It should be noted that in each of these three volumes, liberal education is usually treated as synonymous with the total undergraduate curriculum.

A third approach, the examination of national trends in undergraduate curricula, updates and expands the earlier work of Dressel and DeLisle (1969). This focus has been pursued largely under the auspices of the Carnegie Council on Policy Studies in Higher Education. In two national surveys and a catalog study between 1970 and 1976, which are cited extensively in Levine (1978), the Council provides a wealth of informative data concerning undergraduate education. A separate publication sponsored by the Council focuses more specifically on trends in the structure of college curriculum as it is revealed by patterns of requirements, time distribution, and electives. Blackburn et al. (1976, pp. 7-20) found that from 1967 to 1974 the amount, content, and structure of the general education portion of the baccalaureate changed markedly: students were taking fewer general education courses, more electives, and moving away from prescribed course requirements toward distribution requirements.

A fourth approach focuses on the description (usually including some analysis) of innovations in liberal education. Since Brick and McGrath's *Innovation in Liberal Arts Colleges* (1969), several other scholars have examined various innovations. Using data from 26 institutions, Levine and Weingart (1973) examined seven major areas of experimentation in undergraduate education, including general education and student-centered curriculum. In *The Perpetual Dream* (1978), Grant and Riesman evaluated a decade of curricular experiments that began in the 1960's. Their book presents six detailed

portraits of innovative programs, including California's Kresge College and New York's College for Human Services. After developing a conceptual framework for categorizing interdisciplinary programs, Mayville (1978) reviews a number of new programs in this area.

In addition to the scholarly treatment of innovations in liberal education, two organizations have established newsletters in this field. The Project on General Education Models, a consortium of 14 colleges and universities, circulates the *GEM Newsletter,* describing innovative efforts at the participating schools. The Association of American Colleges sponsors *The Forum for Liberal Education,* a topic-oriented publication that regularly identifies a wide variety of innovative approaches to liberal education and provides useful summaries of selected programs (Mohrman 1978c). In addition to these publications, the aforementioned handbooks on undergraduate education (Chickering et al. 1977; Conrad 1978b; Levine 1978) provide many examples of innovations.

A fifth approach focuses on curriculum design, implementation, and evaluation. The work of Axelrod (1968), Dressel (1971), and Mayhew and Ford (1973) is representative of early attempts to develop models of curriculum planning. More recently, Toombs (1978) has constructed a model for curriculum analysis and design, applying it to innovations in general education.

Like curriculum design, the state of curriculum implementation has received uneven attention since the publication of two books sponsored by the Carnegie Commission on Higher Education (Ladd 1970; Riesman and Stadtman 1973) and *Dynamics of Academic Reform* (Hefferlin 1971). However, three examples of recent scholarship deserve special mention. Martorana and Kuhns (1975) present 20 detailed case studies of widely discussed innovations in higher education. Lindquist (1978) reviews theories of change and knowledge utilization, tests these theories through case histories of seven colleges in their attempts to bring about major reform, and postulates a new theory of change. Conrad (1978a, 1979) has studied changes in general education, proposing a formal theory of change as well as a set of strategies for bringing about effective implementation of change in general education.

Curriculum evaluation has received less attention than design or implementation, although three books provide useful overviews for those interested in assessing programs of liberal education (Anderson and Ball 1978; Dressel 1976; Miller 1979). Another publication (Wood and Davis 1978) reviews recent attempts both in designing

and evaluating college curricula; and Chickering et al. (1977, pp. 155-171) provides a useful guide for implementing and evaluating curriculum reform.

In addition to elucidating different approaches to curriculum evaluation, a few researchers have begun to study systematically the impact of programs of liberal education on students. Heath (1973, 1976), for example, has studied extensively the long-term effects of liberal education, finding that the principal effects are the stabilization, symbolization, and integration of values. Another study ("Value Added . . ." 1977) sampled students at three colleges and found that students greatly enhanced their cognitive skills throughout college. Still another thread of research (Winter and McClelland 1978; Winter, Stewart, and McClelland 1978) was designed around a new measure (Test of Thematic Analysis) of the effects of liberal education. Using this measure in a study confined to one liberal arts college and two vocationally-oriented colleges, Winter and McClelland (1978, p. 13) found that seniors in the liberal arts college surpassed others in the ability to create and express sophisticated and complex concepts. This latter line of research will expand in the next few years as scholars study the effects of various liberal arts programs both in comparison to each other and to vocationally-oriented programs.

Finally, a sixth approach includes historical and philosophical treatments of undergraduate education. The historical narrative of liberal education is found in Rudy (1965) and, more recently, in Rudolph's (1977) history of undergraduate education in America. The philosophy of liberal education has received more sustained treatment. Phenix's *Realms of Meaning* (1964) continues to serve as a classic in this area; in recent years, however, the works of Belknap and Kuhns (1977), Brubacher (1977), Hirst (1974), Schwab (1978), and Wegener (1978) have analyzed the key philosophical issues confronting liberal education.

In summary, there has been a clear resurgence of the scholarly literature on liberal education. To be sure, much of the recent literature does not distinguish between liberal education and the total undergraduate curriculum, making it virtually impossible to separate these elements. Some of the literature is extensively descriptive, often at the expense of sustained analysis. Yet the study of liberal education has begun to reflect a more scholarly approach; for, in addition to description and historical narrative, attention has focused on analytical approaches to the design, analysis, evaluation, and philosophical bases of liberal education.

Eclipse of the Liberal Arts?

By the end of the 1960's, a vigorous debate over the status of the liberal tradition had begun. In his widely-discussed examination of liberal and general education, Bell defended the idea of a liberal education in the face of the "falling apart of general education" (1968, p. xxiii). Following the campus upheavals of the late sixties and early seventies, other prominent figures echoed Bell's concern about the state of liberal education. Mattfeld (1974) and Bok (1974), in more tempered tones than Bell, argued that the time had come to revitalize liberal education; and many others joined the same chorus (Chamberlain and Cangemi 1975; McGrath 1972a, 1972b; Rice 1972).

By the middle of the decade, the number and intensity of exhortations regarding the state of liberal education rose dramatically, with both scholars and college and university representatives addressing the issue. Bouwsma (1975), McDaniel (1976), and Bledstein (1977), among many others, seemed to agree with Thompson (1976, p. 20) that the "status of liberal education . . . is at present very doubtful. . . . [And] there is general agreement that some basic therapy is called for." In an even more strident vein, Murchland wrote of the "death of the liberal arts" (1976, p. 24).

Many prominent college presidents lamented the impending demise of liberal education. In a stinging critique of Harvard's new curriculum, the president of Hampshire College concluded that the task of invigorating liberal learning must proceed elsewhere (Simmons 1979, p. 29). The president of New York University wrote of the "embattled university" and suggested that universities must "reassert the balance between the transient interests of a particular society and the enduring truths of civilization" (Sawhill 1979, p. 40). Of all college and university presidents, however, none has been more vigorous a critic than Leon Botstein, president of Bard College and Simon's Rock Early College. In a series of speeches, papers, and articles (1976, 1978, 1979), Botstein has consistently attacked the current state of liberal education and made forthright proposals for change.

By the last half of the 1970's, a new national debate about liberal education had begun in earnest. While the proposed curriculum at Harvard and the widely-publicized declaration of the Carnegie Council for Policy Studies in Higher Education (1978, p. 11) that "general education is now a disaster area" received particular attention, similar concerns were expressed at many colleges throughout the country.

Throughout the ongoing debate on liberal education, various

explanations have been offered for its purported decline. Stripped of their embellishments, some of the factors that have been identified repeatedly include: (a) the expansion of knowledge, confounding the task of identifying the body of knowledge that one needs in order to be liberally educated; (b) the declining job opportunities for traditional liberal arts graduates, leading to student consumerism and heightened concern with occupational training; (c) the pressure of graduate schools, academic departments, and faculty members' interest and expertise, breeding academic specialization at the expense of liberal education; and (d) the increasingly diverse student population now attending postsecondary education institutions, making a unified mission particularly difficult.

Regardless of the explanations offered, the debate over liberal education has sparked a number of proposals for change that have been placed on the national higher education agenda. Many of these proposals relate specifically to a renewed concern with general education. In numerous cases, a single overriding question has been posed: Should there be a core curriculum and, if so, what should constitute the core? The issue is, of course, a broader one, by no means limited to the selection or structure of a core "experience." Some of the most salient issues have been phrased in these terms: Should liberal education fundamentally be concerned with the transmission of knowledge and culture, the cultivation of cognitive skills and attitudes, or the development of the whole person? Should a common core of courses be required of all students? Should liberal education programs be organized around academic disciplines or interdisciplinary topics, themes, or problems? Should programs of liberal education be centered around students or the subject matter? Should programs of liberal education include more than the formal curriculum, including factors that transcend the formal components? Should reform center on curriculum or instruction, faculty or administration?

Through a focus on these issues and others, the current debate is often passionate, largely because individuals hold competing visions of liberal education, and rarely because they are antagonistic to the ideal itself. Some observers reassert the humanistic vision grounded in knowledge of our Western culture; some emphasize broad developmental goals transcending the formal curriculum; and some propose learning experiences based on modes of knowing and higher-order intellectual skills; while others prefer the status quo. In short, there are competing claims for the future of the liberal arts, with conflict triumphant over consensus in the recent literature on liberal education.

Trends in Liberal Education

With issues of liberal education placed high on their agenda, many colleges and universities have begun to make both major and minor changes in their programs of liberal education. At least two major factors have helped to precipitate what is perhaps the most vigorous period of innovation and reform in liberal education in America. First, the financial woes of many liberal arts institutions are often cited as an obvious catalyst, forcing institutions to redesign their undergraduate programs in order to attract more students. Second, and relatedly, the efforts of the federal government (especially the Fund for the Improvement of Postsecondary Education and the National Endowment for the Humanities), private foundations, and higher education associations (such as the Association of American Colleges and the Council for the Advancement of Small Colleges) have stimulated innovation in liberal education through generous financial and organizational support for innovative programs. Regardless of the precipitants, a substantial number of postsecondary institutions have begun to initiate or implement changes in their programs of liberal education.

In an essay discussing our dualistic attitudes toward life and particularly education, Halliburton's remark serves as a most appropriate warning to any analysis or summation of "trends:"

> Even a cursory review of higher educational practice in recent years reveals a series of overcompensating adjustments or swings. The preoccupation with "trends" within the higher education system is merely a subtler reflection of the same pattern. We function in accordance with short-term scenarios which call for a full-throttle movement in one direction, then in the opposite direction (Halliburton 1977, p. 44).

The following categorization is drawn from an analysis of various documents from 100 representative institutions of higher education. In accordance with Halliburton's caution, an attempt has been made to avoid the rigidity of a too discussive framework and to avoid narrow focusing on the surface reflections rather than on the deeper currents that reveal lasting patterns of curricular change. Particular institutional examples of curricular trends are mentioned only briefly. These are cited frequently and explicated at some length in all three of the recent, comprehensive works on the college curriculum (Chickering et al. 1977; Conrad 1978b; Levine 1978). This section will concentrate on the significance of seven major trends.

One of the most publicized trends of the last two or three years has been the movement back to a required, integrated group of

courses or experiences, usually designed to implement the ideals and goals of liberal or general education. Studies conducted shortly before the emergence of this trend (Blackburn et al. 1976; Dressel and De-Lisle 1969) indicated a relaxation of formal requirements and a corresponding increase in student elective freedom and coursework within the major area of study. This pattern, combined with the seeming lack of intellectual coherence and mission of the curriculum as a whole (and particularly for the general education component), has led to both predictions and explanations of the demise of the liberal arts by a variety of commentators (Brubacher and Rudy 1976, pp. 302-304; Chase 1978; Murchland 1976; Rudolph 1977, pp. 245-289). This question of whether or not the liberal arts are in decline or facing imminent death is itself problematic, dependent on both the accumulation of empirical data and the more subjective interpretation of the meaning of liberal education. However, few would disagree with Levine that there is "a sizable and still-growing body of literature that indicates that colleges tend to move across the continuum from core curricula to free electives and back in pendular fashion" (1978, p. 14). The recent surge of interest in liberal education—whether or not it is regarded as an indication of "revitalization" or as yet another twist in the liberal arts' hundred-year-long "death struggle"—is historically typical and to be expected.

Interestingly, broad societal trends have been used both to support and critique (rather than explain) the increase in the prescribed component of the curriculum. The dramatic increase in the number and diversity of students, the expansion of knowledge, the pluralistic and democratic structure of American government and society, and the heightened concerns for human rights and ethical behavior are some of the most frequently cited causes. However, the new programs ultimately seek their rationale not solely from modern-day realities but in some vision or ideals of the "educated person" and the "learning community."

Defining "core curriculum" as that coursework which undergraduates pursue in common, Boyer and Kaplan propose the outlines of a core curriculum in *Educating for Survival* (1976). They argue that there should be a new version of liberal and general education, required of all students, that is organized around the past, present, and the future and culminates in a concern with the "moral and ethical considerations that guide the lives of each person" (1976, pp. 75-76).

Recently, the word "core" has come to be used to describe the increase in integrated and prescribed curricular components. As Le-

vine (1978) notes, the end of the pendulum swing toward increased prescription and integration is the adoption of required courses. To clearly separate the end from intermediary stages, thereby encouraging a concentration on the characteristics of a curriculum instead of the seemingly endless arguments about whether or not a curriculum qualifies as "core," we will use the term only in the strict sense of required coursework.

While the Boyer and Kaplan book received significant attention, much of the national debate over prescription (and integration) has evolved around the new Harvard curriculum, approved by the faculty in 1978. Although many academics are sympathetic to the renewed concern over liberal education, the "Harvard Plan" has been widely criticized. Articles about the curriculum in *Saturday Review* (Schiefelbein 1978), *Harper's* (Sawhill 1979; Simmons 1979), and *Change* (O'Connell 1978), as well as comments from a group of educators (Maher 1978), have generally been critical. Coupled with other articles on the core curriculum (London 1978; Shulman 1979), these publications have helped shape and stimulate the national debate over general and liberal education.

The trend toward increasing prescription and integration has been described by many curriculum committees, change advocates, historians, and other commentators on higher education. Conrad offers this definition: ". . . a common set of related experiences designed to achieve specific purposes" (1978b, p. 56). Other descriptions include: "a means for achieving an institution's general education goals" (Shulman 1979, p. 6); an introduction to the "essential nature" of areas of knowledge (Toombs 1978, p. 26); and an attempt to "regain coherence" in the aftermath of the turbulent 1960's (Scully 1978, p. 1). The key terminology does include "coherence" and "unity" as well as "integration," "consensus," and "commonality." Many programs combine this traditional, philosophical underpinning with a willingness to experiment with team teaching, interdisciplinary studies, instruction in "applied" or noncognitive areas, different calendar and course structures, and other innovations.

Undoubtedly, Harvards' reexamination of its curriculum and subsequent adoption of a set of 80 to 90 courses emphasizing approaches to knowledge has broadened, if not popularized, the debate on general education and the core curriculum. An unusually diverse array of colleges and universities, however, had already instituted core programs. Perhaps the most well-known is St. John's which, like its colonial predecessors, has a totally prescribed curriculum but, unlike

anything else in the past or present, concentrates exclusively on the great books, the classics of Western (and now Eastern) civilization. This content, in conjunction with open-ended seminars and shared-inquiry tutorials, has been the constant curricular structure at St. John's for over 40 years. Although certainly not to the same extent as St. John's, the University of Chicago has also had a core of varying structure and composition since the late 1920's. More recently, many small private liberal arts colleges including Davis-Elkins, Austin, and Marist, and some community colleges as well (such as Miami-Dade) have adopted core components, courses, or some other form of required structured experience into their curriculum.

A second trend in liberal education has been the surge of interest in relating the outcomes of liberal education to curricular programs. In *Investment in Learning* (1977), Howard Bowen offers a broad overview of the individual and social value of higher education. His chapters outline intended outcomes as well as the still inadequately measured consequences of higher education for such areas of individual development as cognitive learning, emotional and moral growth, and competence for citizenship. He also examines such societal outcomes as progress toward human equality and results from research and public services. As a major work summarizing the disparate research in these areas, Bowen's book is a landmark in its pivotal concern for the effects of higher education.

This focus on the outcomes of liberal education is a new and intriguing element in the liberal arts tradition, with no easily identifiable ancestor. If the increasing sophistication of psychological measurement and the development of both behavioral and conceptual analysis have made such a focus possible, falling academic standards, grade inflation, consumerism, and the call for accountability have fostered popular support for the efforts. The outcomes approach has assumed two basic forms. Several organizations are attempting on a national scale to determine the overall effects of the college experience on the graduates and society at large, and are seeking to verify that colleges do achieve all that is claimed in their catalogues. The report of the National Center for Higher Education Management Systems, *Measures of Institutional Goal Achievement* (Romney 1978), provides an example of a comprehensive attempt to codify and measure the outcomes of higher education. There is also a focus on the individual student and his abilities as developed through a variety of college experiences and evaluated by such means as traditional written tests, oral examinations, testing by computer, and even self-examination.

In their monograph, *Designing and Evaluating Higher Education Curricula* (1978), Wood and Davis devote a section to a summary of tests of academic outcomes and to the whole phenomenon of competence-based education. They discuss the Educational Testing Service's instrument that measures academic competence in areas of general education and the College Outcomes Measures Project of the American College Testing Program. These national and other locally-developed tests attempt to measure such areas as communication skills, critical thinking, values awareness and analysis, problem-solving, and synthesizing ability.

AAHE/ERIC devoted a monograph to *Competency Programs in Higher Education* (Trivett 1975). Travis, Facione, and Litwin (1978) offered a variety of specific arguments for an outcomes-based liberal education. Each of the three most recent works dealing with the undergraduate curriculum (Conrad 1978b; Chickering et al. 1977; Levine 1978) devotes a considerable amount of space to the competence-based program. Alverno College and Mars Hill College are among the frequently cited examples of institutions that have redesigned their curriculum on a competence model; others have been more moderate in utilizing an outcomes approach for certain types of skills or for certain components of the curriculum. Also, schools vary considerably in their degree of emphasis either on the measurement of broad generic skills or on behaviorally demonstrable skills. Most competence programs, however, focus on skills or abilities, as opposed to the testing of certain sets of facts or given areas of knowledge. In his provocative essay on competence-based education, Ewens (1979) identifies the collapse of classical man's vision of theoretically unified knowledge as the key to understanding our present-day confusion about the nature of liberal education and as the impetus for developing an approach to liberal education based on measurable skills, rather than on an accumulated body of fixed knowledge.

Competence-based education and the general concern for educational outcomes is directly linked to a third major trend, the redefinition of liberal education in terms of process—and not simply content. In 1828 the authors of the Yale Report laid emphasis on the "discipline" of the mind and the "habits" of thinking. Indeed, the major figures on all sides of the liberal education debate of the twentieth century have looked on liberal education as ultimately concerned with the development of intellectual abilities.

In this century, Dewey is viewed as the major proponent of an education centered around skill development and problem-solving. On

the other end of the spectrum, Hutchins and his colleagues in classical essentialism have focused on reason, theoretical and practical, as a uniquely human ability—in need of development as we search for the "good life" (Hearn 1972). Conflicts have arisen through differences in the structures and content utilized to develop human capabilities; with the exception of those associated with the Great Books program at St. John's College, no major twentieth-century figure in higher education has claimed "the accumulation of a fixed body of knowledge" as the primary goal of the colleges and universities.

The major calls for curriculum reform after World War II—Harvard's "Redbook" (Harvard Committee 1945), The President's Commission on Higher Education (1947), Bell's *The Reforming of General Education* (1966), and *Missions of the College Curriculum* (Carnegie Foundation for the Advancement of Teaching 1977)—have all emphasized the role of higher education in cultivating mental skills. It has not been until this past decade, however, that general education has abandoned heritage and survey courses (necessarily defined by their content) in favor of courses and experiences organized directly around thinking skills. The development of thematic studies, competence programs, and problem-solving courses are examples of this trend.

In presenting a rationale for liberal education, Bennett notes, "The emphasis now is no longer on acquiring content and informational, but on acquiring intellectual skills and abilities. The point is to develop conceptual sophistication and critical judgment" (1977, p. 69). In a similar vein, Hearn writes, ". . . liberal education refers not to items of knowledge but to qualities of mind, temperament and character" (1972, p. 26). As evidenced through the proliferation of such action verbs as analyze, critique, interpret, solve, experiment, and judge within the higher education lexicon, there has been a shift to a pragmatic emphasis on the development of mental processes and skills.

"Integration," "outcome," and "process," although intermingled trends, are easily identifiable. The fourth trend in the liberal arts curriculum, however, is difficult to articulate, and it does not easily proffer an identifying label. The curriculum, especially the general/liberal education component, is being stretched beyond the traditional emphasis on reason and intellect. The old, sectarian liberal arts institutions were concerned with moral character, self-discipline, and a host of other behaviors, values, and attitudes, but their development was either inculcated through the total experience and community of

the institution or aided through the rigorous intellectual endeavors within the curriculum. The first recent group of proposals for change in this area came from those who wished to promote growth both within and outside the traditional cognitive-rational realm. The philosophy of "development of the whole person" gained substantial ground in the 1960's and by the middle of the 1970's had become the staple fare of liberal arts programs and institutions (Bowen 1977, pp. 33-34). Key proponents have included Chickering (1976), Cross (1976), and Brown (1972), the last of these a leading spokesman of the student personnel movement—a movement and profession that is premised on the notion of "development of the whole person." These individuals and others have had a concern for the affective realm, emotional development, values awareness, interpersonal skills, as well as physical dexterity and ability to work with "things." In past years developmental psychology (Perry 1968) has been linked with the older and broader-based humanism in the ongoing attempt to promote the total development of the individual.

There has emerged recently a new approach that emphasizes a reexamination of intellect and reason themselves. Rather than listing affective or emotional skills or attitudes that need attention in addition to reason, this has involved a broadening of the concept of reason beyond its association with scientific method, pure theory, and value neutrality. In this vein, Mattfeld (1975) calls for a new emphasis on the aesthetic and intuitive, McDaniel (1976) suggests doing away with the artificial cognitive-affective split, and Murchland (1976, 1979) grounds his concept of practical reason in the works of Aristotle and the society of classical Greece. Generally, these commentators, and others, identify reason as too narrowly limited by its almost complete association with empirical methodology and purely intellectual concerns. In their expansion of reason to include the aesthetic, value, and pragmatic realms, these individuals seek to undermine or bypass our contemporary divisions between cognitive and affective, subjective and objective, theory and practice.

Today, there are curricular structures and experiences stemming from at least two major works in the philosophy of the curriculum, each outlining different forms of rationality (Hirst 1974; Phenix 1964). The forms these authors identify, including moral, aesthetic, and "self-understanding and awareness," fall well beyond the traditional purview of both "reason" and the curriculum. And these "forms of knowing" or "realms of meaning" have been taken seriously by many advocates for change. Coughlin (1976), Mattfeld (1975), and

Morris (1978) call for a rebirth of the humanities with emphasis on the aesthetic and intuitive, while Botstein (1979) and Foster and Burke (1978) forcefully argue that the fine arts should be integrated into the liberal arts curriculum.

A fifth major trend, stemming directly from this expansion of our concept of intellect and the new concern for noncognitive areas of growth, is the focus on values or moral education. There seems to be a growing consensus among college students, administrators, faculty and the general public that some form of values education should be a component of general education (Carnegie Foundation for the Advancement of Teaching 1977, pp. 240-241). Recent societal events indicating a dramatic decrease in ethical behavior and standards in this country are often cited both as a primary reason for, and explanation of, the renewed concern for values in the curriculum. There are, however, deeper historically-rooted reasons stemming from the heavy emphasis placed on value neutrality and objectivity, the twentieth century trend toward a purely relativistic stance on value issues, and the outright rejection of the value/moral realm as meaningless.

Recently, the Association of American Colleges devoted one issue of its *Forum for Liberal Education* (Mohrman 1978a) to the concern for values, offering an overview of programs dealing with ethics and values. The Hastings Center—a private institute addressing ethical problems in various disciplines—is conducting the "Project on the Teaching of Ethics." The Project is examining the teaching of ethics within both professional and undergraduate programs. In general, there has been a proliferation of articles, usually pleas, for moral education in the college and university setting (Callahan 1978; Callahan and Bok 1979; Middleburg 1977; Monan 1979; Splete 1977; Trow 1976). Moreover, a sizable number of institutions have adopted programs in this area, including St. Olaf, Washington and Lee, North Central, and the University of California at San Francisco.

This concern for values is an area particularly fraught with misunderstanding and potential for great abuse. The confusion over terminology (values, morals, ethics) is only amplified by (a) the rapid proliferation of instructional methods (values clarification, moral reasoning, moral development, applied ethics, and so on) and (b) disagreement over appropriate locations for moral development (within the curriculum, student-teacher interaction, community atmosphere, residence-hall programs). Fundamentally the concern for values has assumed two forms in the curriculum. Some programs have concentrated on value postulates and underlying assumptions within

the disciplines. Numerous courses and programs, especially those dealing with values in science and technology, have followed from this focus. Other programs have been concerned with the moral growth or education of the individual student. This latter form of values education is often more radical in its departure from the traditional modes of narrowly defined intellectual inquiry. It is interesting to note that the recent Harvard curriculum committee identified moral reasoning as an essential element intended to introduce students to important traditions of thought, make them aware of the intricacies of ethical argument, and to help them come to grips with particular questions of choice and value.

The development of new relationships between the liberal arts and the professions is a sixth trend. Historically, the liberal arts have been closely linked to the oldest professions of theology, medicine, and law. Today, however, the balance is an uneasy one with academic specialists, broadly humanistic faculty, and proponents of career education each vying with the other for more influence in the undergraduate curriculum. Jerry Gaff (1980) writes:

> A tremendous expansion of professional education has taken place in recent years in colleges and universities and has forced new definitions of relationships between liberal arts and the professions. This ascendancy of career education within the academy has paralleled the trend toward professionalization of work throughout society. One logical result of these shifts is that liberal arts courses are increasingly tailored to the particular interests and concerns of various vocational groups (pp. 23-24).

Gaff goes on to suggest that at least part of general education could study the professions as a societal phenomenon, or that an institution could purposively tailor its liberal education courses around the interests and skills of various vocational groups. Three major proponents of career concerns in the undergraduate curriculum (Cheit 1975; Kaysen 1974; Meyerson 1974) vary in their success at reuniting theoretically the liberal arts with the professions. Meyerson may be most successful in his call for the restoration of the ideals of vocation and service to a central place in the curriculum of higher education. With his contention that liberal education ought not to exist in isolation and that professional training ought not concentrate exclusively on narrow career skills, Meyerson goes on to suggest practical, creative tensions between "the concrete and the theoretical, the rationalistic and the empirical" (Meyerson 1974, p. 175).

In *Missions of the College Curriculum* (1977), the authors sug-

gest "the fact that students place a high value on career preparation while they are still in college does not mean that the specialized studies involved in such preparations are all employers should care about" (Carnegie Foundation for the Advancement of Teaching 1977). They go on to indicate several skills associated with a liberal education that all employers "should" value, such as the ability to set and meet standards of ethical behavior, an appreciation of local, national, and foreign frames of reference, and an ability to learn independently and quickly.

In *Handbook on Undergraduate Curriculum* (1978), Levine claims that there is nothing intrinsic to general education that requires it to be impractical or unworldly. Bergquist (1977) offers a career-based model for designing an undergraduate curriculum, and Magill (1977) calls for greater emphasis on a sense of vocation in liberal education. The growth of professional education in the undergraduate curriculum includes revision of the major and experimentation with internships and experiential learning. Professional education has found a central place in the current practice of liberal education.

A seventh, and final major trend in liberal education has affected all of higher education in the 1970's. This is, for lack of a better term, the "delivery system" of the curriculum: the degrees, credits, administrative structures, and calendar arrangements. Toombs (1978, p. 27) identifies such structures as off-campus learning centers, separate administrative entities for general education, and flexible time scheduling as new curricular "artifacts" often used to support new and different aims of the curriculum. For example, the aforementioned focus on outcomes has been paralleled by a considerable amount of change in both degree and time structures, and the development of a core to the curriculum has resulted in new forms of timing and credit for courses.

Wyer examines such calendar innovations as the 4-1-4 plan, which allows for a great deal of experimentation in the shorter, middle time period and is an expression of the hope that institutions will move "away from traditional and arbitrary divisions of time and toward temporal units which attempt to match student need, instructor preferences, and educational goals" (Wyer 1978, p. 186). Levine refers to curricular mechanisms that shorten and lengthen the time spent enrolled in an institution of higher education, as well as options that allow for greater variability and individuality in duration of time and in time contexts (day, evening, early morning, weekends, and vacations) (Levine 1978, pp. 209-248).

In many institutions, traditional credits and degrees have been retained. But new forms such as the continuing education unit, the A.A. degree, college level examination placement and advanced placement credits, the external degree, and nondegree programs are often offered on an optional basis. Although there is no standard terminology in the area of curricular support structures, there is general agreement that their overall affect on educational practice is a powerful one that is often left unacknowledged.

There are several other curricular trends that have had some effect on liberal education. These include the spread of liberal education programs for adults (Mohrman 1978b). The emphasis on basic skills is another trend—an emphasis that often has been manifest outside the formal curriculum in learning centers, tutorial programs, and individualized learning experiences. Many core curricula contain requirements in composition and general mathematics, and the tested competences of an outcomes-based program often include basic skills. A concern for the noncurricular aspects of liberal education has been concurrent with the development of the "whole person" philosophy and with the concern for noncognitive elements of education and individual growth. Experiential learning, one of the most innovative trends in higher education, has often been left aside in discussion of the general-education component of the curriculum.

A conclusion based on the identification of major curricular trends in liberal education is neither possible nor appropriate in this study. However, two tentative implications can be drawn. First, there is a revitalized concern for liberal education with a concomitant growth in proposals, definitions, and scholarly research. Second, as Gaff has pointed out, no single model of general or liberal education has emerged (1980, p. 25). Moreover, there is no consensus about whether or not a single model should be developed. The chapter following will identify and analyze several models of liberal education that have emerged during the last decade.

Models of Liberal Education

Liberal education in America has almost invariably been linked to an undergraduate experience that was organized around the transmission of subject matter. Emerging models of liberal education mirror the continuing interaction between this content-specified curricular tradition and the recent trends discussed in the preceding chapter. Partly because they are based largely on anecdotal evidence, most efforts to identify liberal education models have resulted in groups of diverse but overlapping models. The number, diversity, and laxity of existing groups of models virtually require the adoption of some analytic mechanism for comparison and contrast.

Following a brief discussion of the anecdotal approach to model-building, this chapter provides an analysis of existing curricular models based on a framework organized around three major components of the curriculum. The chapter then examines in detail the three most widely used models of liberal education.

The Anecdotal Approach

The scholarly literature and the popular discussion of models of liberal education suffer from the same lack of uniformity, often without a justifiable pattern of organization, that is seen in the general debate over liberal education. Commentators usually offer a group of models with individual categories that are neither inclusive nor discrete. Models are often cited as examples of innovation or as illustrations of specific arguments without regard to their connections to other models.

The anecdotal groupings that result often reflect a wide diversity of curricular approaches, yet they also display a perplexing analytic laxity. Categories are primarily descriptive and often specific to the efforts of a few institutions and, in a few extreme instances, are created by the labelling of a single case. A related difficulty with this approach is the lack of clear definitions and the inadequate analysis of the conceptual derivations of the models. Often the result is a group of models, several of which might be subsumed under another model or may be combined to form a more general category. The anecdotal approach is also susceptible to errors of omission. To the extent that the groupings are understood to be casual and not com-

prehensive, the possibility of omissions is not critical. However, when anecdotal results are presented as a typology—which is usually the case—the lack of a comprehensive analysis is a serious fault. The development of generic categories would enhance our ability to compare models from different groups.

The strength of the anecdotal approach lies in its ability to capture the richness of its subject. Curricular innovations are often complicated and there is a need for sufficient description of the efforts of postsecondary institutions to reinvigorate the higher learning. The renaissance of the debate over liberal education has increased the spectrum of both possible and implemented models. Through its reliance on description of practice and its tolerance for ambiguity, the anecdotal approach has been well-suited to the initial development of models of liberal education.

Models of Liberal Education: The State of the Art

In most attempts to develop models of liberal education, the extra-curriculum is treated, if at all, in a tangential and cursory manner. In addition, the models are usually designed to apply to the whole undergraduate curriculum and are not oriented specifically toward a liberal or general education component. Despite this broad focus on the part of designers, most models can be applied to liberal education, and even those which by definition are comprehensive have major implications for the liberal component of the curriculum.

Before discussing several curricular models, an analytic structure for the purposes of evaluation and comparison will be developed. Several authors have proposed dimensions of the curriculum that might serve as an analytical framework. Bergquist cites five dimensions for classifying nontraditional curricula: curricular breadth, curricular control, instructional process, curricular structure, and curricular outcomes (Bergquist 1977, p. 85). Axelrod (1968) notes two groups, each of which contains three curricular elements or dimensions: The structural dimensions are content, schedule, and certification; the implemental elements are group/person interaction, student experience, and freedom/control. Conrad (1978b, p. 11) identifies four curricular emphases: locus of learning, curriculum content, design of program, and flexibility of program.

To provide a structure for analyzing the diverse curricular models, the following analysis is based on three components of the curriculum: content, process, and outcomes. These components are general enough to allow latitude in the description of models while, at the same time,

giving a focus to the discussion; they also subsume the dimensions mentioned by the authors previously cited.

Although the three components are commonly used constructs, their use in this context calls for elaboration. *Content* encompasses the information transferred in the learning activity; *process* refers to the method of transfer; and *outcomes* are the identifiable results of the learning process. Although more than one content or process description could be used for a program, outcomes are specifically stated in the plural in recognition of the difficulty of identifying the results of a program of liberal education.

An important factor in the description of the models is the degree to which a particular component is prescribed. In different curricula, components may take on varying degrees of prescription. A given course, such as a values/ethics seminar, can be an option at one institution and a required course at another. Although the content, process, and outcomes may be the same, the effect on the curriculum as a whole will be subject to the degree of prescription.

Often a model description is based on a specification of a single component while description of the other components is minimal or omitted. For example, the discipline-based curriculum is explicitly a content-specific model. Process, defined as traditional classroom contact, is often an assumed but not an essential part of the model.

Most model descriptions emphasize the delineation of one or, at most, two of the components. This fact, combined with the anecdotal nature of the data supporting most models, sometimes allows implementing institutions to fill out components that are not specified by the model description. The great books curriculum is an example of the *de facto* model-completion process. The seminars and tutorials at St. John's College, an institution unique in its total adherence to the great books models, have—for lack of competing implementation-based process definitions—become characteristics of the primarily content-specific model.

Before continuing to a discussion of the curricular models of liberal education, one concept often linked with liberal education must be examined—the core curriculum. Perhaps most carefully treated in Boyer and Kaplan's *Educating for Survival* (1977), the core curriculum is unlike other models in its dependence on the prescription of the components. While other models usually are based on the description of one or more components, the essence of core curricula is requirement instead of content description. This is clear in the Boyer and Kaplan definition of core curriculum: ". . . the coursework

that undergraduates pursue in common, the cluster of subjects and classes that an institution of higher learning insists that all its students take together" (1977, p. 10).

One trend in core curricula is a movement away from prescription based only on traditional notions of content. Shulman (1979) notes that

> core courses may still be "common and tightly knit" but they need not be content oriented. Instead, these courses may focus on themes, values, problems, or essential skills that the college considers important for its graduates to confront or master (p. 6).

Whether the essential specification is one of content, process, or outcomes—or some mixture of the three—a core curriculum requires a definition of what learning is significant enough that it should be required of all students. The difficulty of this endeavor is reflected in the plea for a core curriculum in the final passage in *Educating for Survival*:

> To attempt to provide a sturdy pair of shoulders onto which the diverse individuals of the future may climb might appear at this late hour a quixotic enterprise. Still, we have made the necessary wager here that it is not yet impossible. To suppose that the task is archaic is one thing—an erroneous supposition, in our opinion. To suppose that it is hopeless is bluntly unacceptable (Boyer and Kaplan 1977, pp. 78-79).

Rather than being a parallel alternative to the other models discussed below, the core curriculum is an orthogonal concept that can be applied to any model. For example, as implemented by St. John's the great books model is a core curriculum, while another institution might use it only as one option for students. Thus, the issues surrounding the core concept—the existence of a necessary body of knowledge, skills, or experiences and the propriety of abolishing student choice—will be problematical for any curriculum that is implemented as a core program.

Models of Liberal Education in the Recent Literature

A number of groups of models have been proposed in recent years, and three groups are presented in the table on the next page.

The models by Chance, Bergquist, and Conrad are anecdotal in their adherence to descriptive terminology and implementation as the stimulus for the inclusion of a model. Competence-based curricula appear on all three lists. Traditional discipline models appear on two lists, as do some variations of the great books curriculum: while the

Models of Liberal Education

Bergquist (1977)	Chance (1980)	Conrad (1978)
Heritage-based	Distribution	Academic disciplines
Thematic-based	Integrative	Student development
Competency-based	Values	Great books and ideas
Career-based	Student-based	Social problems
Experience-based	Competency-based	Selected competences
Student-based	Career focus	
Values-based		
Futures-based		

former is often easily dismissed as non-innovative, the latter is an isolated implementation that has taken on the force of a major innovation because of its visibility. All three groups incorporate models that stress each of the three components of the learning process. Chance's distribution and integrative models, Bergquist's heritage and thematic-based curricula, and Conrad's great books and ideas and academic disciplines are examples of models that are primarily content-defined. All three student-oriented models emphasize process; and each of the three competence models is based primarily on outcomes.

Bergquist's group of models is comprehensive and descriptive, but it lacks a clear classification system. Several categories are overlapping, and the rationale for separating some models is not clear. For example, the heritage- and futures-based curricula seem to be subsets of the thematic curricula. Given this separation, it is unclear why futures-based curricula are given a separate category while environmental-based curricula are incorporated only as examples of the thematic model.

The two Bergquist models based on students and experiences are strongly process-oriented. While the values-based curriculum may also be process-oriented, it often has a strong content specification that mitigates the process emphasis. The student-based model is strongly anchored in student freedom and participation. The five student-based approaches Bergquist identifies include "increased freedom in the selection of . . . course study" and the use of "individualized learning contracts" (1977, pp. 101-102).

The student-based model is noteworthy in its opposition to the

principles underlying the core curriculum. The diversity of emerging liberal arts curricula can be seen in the contrast between Bergquist's description of a student-based model: "colleges allow[ing] students significant control over the substance and process of instruction" (p. 101); and Boyer and Kaplan's plea for the core curriculum: ". . . education for independence is not enough. Education for interdependence is just as vital. Only a common core of study confronts the fact that isolation and integration are both essential . . ." (1977, p. 54).

Bergquist combines models based on fundamental differences in the choice and implementation of curricular components with models that appear to be based on minor differences in subject matter. The latter seem motivated by a sensitivity to current topics of interest (for example, careers, acquiring jobs, and encountering the future). The risk inherent in the inclusion of models defined by current trends is in the often transitory nature of such subjects. The inclusion of these models, despite the risk that they will soon become obsolete, reflects a shift toward demonstrated relevence as a criterion for liberal arts curricular content.

The models based on values, students, competencies, and careers in Chance's group are much like those proposed by Bergquist; the distribution and integrative models are significantly different and merit some discussion. The distribution model reflects the predominant curricular pattern in the United States. Its inclusion is this group of models makes the group a more realistic description of current practice than Bergquist's innovation-oriented list. Although distribution-based curricula are "subject to mismanagement and abuse," Chance notes that, "At its best this approach guards against an illiberalized specialization of learning, provides the student a larger and more unified field of knowledge, and acquaints him with the modes of discourse and evidential systems of the various disciplines" (1980, p. 5).

Chance's major contribution is his brief development of the generic category "integrative models." The inclusive nature of this category is seen in its description.

> The aim of the integrative curriculum is to draw upon the knowledge and methodological approaches of several disciplines in dealing with a common problem, theme, or period. . . . The proponents of integrative models make use of such terms as 'inter-', 'intra-', 'trans-', and 'multidisciplinarity'; and 'consummative', 'capstone', or 'synoptic' learning (p. 5).

The use of this category, which stresses the structuring of content rather than the choice of specific subjects, reduces the proliferation of

essentially similar curricular models and encourages the examination of substantive curricular characteristics rather than the emphasis on transient topics.

Conrad (1978b) develops a framework for curricular design around five "organizing principles," which are used here as models of liberal education. Conrad does not develop the organizing principles as a rigorous typology:

> It should be emphasized that these organizing principles are not primarily distinguished from one another at a broad philosophical level. . . . The crucial distinctions, instead of residing at the philosophical level, lie in the way knowledge is organized and communicated (Conrad 1978b, pp. 13-14).

In Conrad's group, the seemingly ubiquitous student- and competence-based models appear as organizing principles, as does the dominant academic disciplines model. The St. John's curriculum provides the basis for a category expanded to include great ideas as well as books. The fifth category, social problems, is a combination of an integrative structure and a subject orientation. "Most of these programs are characterized by a problem orientation, a concern for social responsibility, and a belief in the need to integrate knowledge" (p. 32). This approach is an explicit recognition of both the need to provide structure for the curriculum and to address significant special subject areas. It is a characteristic of our current world view that social problems are considered a special subject.

Two trends in models of liberal education can be discerned from the groups presented here. First, there seems to be a movement toward categories grouped on the basis of descriptions of implementation efforts at selected colleges and universities. From the early Mayhew and Ford (1973) categorization system for models of nontraditional education, to the more recent groups proposed by Chance, Bergquist, and Conrad, the emphasis seems to be shifting toward implementation as the basis for curricular classification and away from purely theoretical considerations.

The second trend is toward the consideration of "current topics" that occasionally take on such importance that they are treated as required subjects; they nevertheless are a product of specific, often transient, forces. This clearly reflects the increased emphasis on adaptation to the environment. In different terms this trend can be viewed as a triumph of existentialism, as reflected in increased adaptability, over the essentialism that has prevailed in most earlier attempts to define the scope of the liberal arts.

Three Models of Liberal Education

The interaction of a discipline-based tradition, an anecdotal approach to the formalization of models, and an increase in environmental sensitivity has resulted in the dominant models of liberal arts curricula. The three models presented in this section were chosen for their broad representativeness and comprehensiveness as well as their primacy in current usage.

The Distributive Model. First, in recognition of its pervasive use, is the distributive model. An understanding of the distributive system is best grounded in a conception of a continuum of prescription with a core curriculum at one end and a free elective system at the other. Conceptually, anything not at the extremes of the continuum is a distributive system; that is, "requirements designed to ensure that each student takes a minimum number of courses or credits in specified academic areas" (Levine 1978, p. 11). The key issues in distributive models lie with the degree and format of prescription.

The seemingly essential pairing of the distributive model with a disciplinary curriculum is an artifact of the tradition of curricular development in this country. A distributive model describes the amount and content of prescribed coursework and could apply to any curricular structure. The admixture of prescription and choice can take place in any curriculum; for example, a competence-based curriculum may specify several competences that must be met and allow choice within groups for others. Essentially, this is a distributive model. However, the emphasis in the discussion here is on the implementation of the distributive model in a disciplinary environment. Because of the frequency of pairing the approach with the content structure, it seems unrealistic to try to separate the questions of amount and content of prescription from the questions raised by the disciplinary structure.

Levine (1978) identifies four types of distributive curricula based on degrees of prescription:

1. Prescribed distribution requirements "involve combinations of specified courses, student course options from short preselected lists, and a limited number of electives in designated areas" (p. 12). The popularity and acceptance of this plan is indicated by the fact that 85 percent of all colleges use prescribed distribution requirements. (Catalogue Study in Levine, p. 12).
2. Minimally prescribed or "smorgasbord" distribution requirements "generally require few if any specified courses" (p. 12).

Structure is provided through placing emphasis on areas rather than individual courses.

3. Recommended distribution guidelines are the same as "smorgasbord" requirements with one difference: they are not required. Few institutions choose to use this system, which has no force of law within the curriculum; few students seem to use the guidelines (p. 13).

4. Levine's fourth category, other distribution requirements, is an umbrella group covering such diverse arrangements as competence-based and examination-based requirements.

Despite the prevalence of distributive models in American higher education, there is a strong chorus of criticism of the form. Many commentators on the future of the college curriculum treat discipline-based, distributive programs as the unexamined status quo, unworthy of serious consideration.

The recent major restatement of a distributive curriculum is Harvard's "Report on the Core Curriculum" (Harvard Committee, 1978). Although the title refers to a "core," the Harvard plan is, in fact, based on a distributive model. The report acknowledges that the new curriculum is not organized around a required core of coursework: "We are not proposing an identical set of courses for all students . . ." (p. 3).

The program's requirements include a minimum of eight half-courses covering five areas: Literature and the Arts; History; Social and Philosophical Analysis; Science and Mathematics; and Foreign Languages and Cultures. Additional nonconcentration degree requirements in mathematics, expository writing, and foreign languages may be met by examination or coursework. The report asserts that the curriculum is innovative despite the apparent similarity with accepted distributive models:

> Although the quantity of nonconcentration requirements will remain relatively unchanged, the categories of general education will have been altered to reflect shifts in fields of knowledge and in approaches to learning and made more specific in purpose according to our priorities. And the present proposal has the further distinction, as opposed to distribution schemes, of calling into being courses especially designed or adapted to meet its aims (Harvard Committee 1978, p. 7).

It is worth noting that the stress on fields of knowledge and modes of knowing expressed in the above quotation is representative of a general trend in distributive curricula.

Public comments on the Harvard Report cover a broad spectrum,

from Schiefelbein's (1978, p. 12) observation that "a quiet revolution is taking place" to Stephenson's quoting of Groucho Marx, "there is less going on here than meets the eye" (in Maher 1978, p. 4). The nature of praise and criticism depends primarily on the perspective of the writer. Those seeking radical reduction of requirements are as disappointed as those who favor a totally prescribed approach. Reflecting the popular trend, criticism seems to outweigh praise.

Rather than interpret the results of the Harvard Report in the context of demands made by numerous observers, it is more fruitful to separate the assessment of this particular implementation from the issue of the distributive model. The report rose from a mandate to "reassert the importance of general education" (p. 1). Following from this charge is a desire to regain some institutional responsibility for the education of students and a stated desire, as yet unfulfilled, to overcome some of the restrictions of a strict disciplinary structure. Whether or not the Harvard curriculum meets these goals is still an open question. At this time the major contribution of the Harvard curriculum revisions seems to lie in the catalytic effect of its attempts to struggle with the issue of liberal education, thus providing one major impetus to self-examination across the country.

The Integrative Model. The goal of integrative programs is the development of a body of knowledge and skills through the synergistic combination of several disciplines with a focus on a specific theme or problem. Integrative models respond to the discrete and isolated nature of the discipline-based curriculum by placing primary emphasis on some transdisciplinary subject. This model subsumes any "interdisciplinary" or "thematic" program (for example, Bergquist's heritage- and futures-based models). The primary difficulties in the design and implementation of integrative curricula lie with decisions concerning the chosen topic or topics, particularly the amount of time and effort devoted to any one theme.

The three major parts of integrative models are the pervasiveness of the adoption, the structure of the courses, and the subject chosen as the integrating principle.

The pervasiveness of an integrated program refers to its relation to other parts of the curriculum. This relationship may take three forms. First, in a comprehensive integrated implementation, the whole curriculum and perhaps even the entire institution is designed around the focal topic. An example is the University of Wisconsin, Green Bay, where the curriculum and four of the institution's five colleges

are organized around an environmental theme. Second, an alternative to the comprehensive format is the cluster design in which intensive work focused on a single subject is undertaken in an individual term. For example, the "integrated studies" program at the University of Denver offers students the option of taking one block course that gives 15 quarter hours of credit and is a multidisciplinary approach to a single topic. Subjects are changed from one term to the next, allowing students a choice of topics and increasing the potential for greater faculty participation. Third, component curricula involve a student in courses in the integrated area across a part or all of the undergraduate curriculum with concurrent participation in nonintegrated studies. Pacific Lutheran's Integrated Studies Program, which is discussed below, is an example of a component approach.

The second part of an integrative model is the structure of the courses, especially their relationship to the disciplinary format. Some integrative programs rely on courses developed, taught, and controlled by traditional academic departments. Other programs use courses that draw content and faculty from more than one discipline, making a direct effort to move away from disciplinary control. Interdisciplinarity is a frequent, but not a necessary, attribute of integrative curricula.

In terms of the third part, the subject chosen as the integrating principle, there are few constraints on the topic selected as a focus for integration. They may be narrow (for example, Victorian England) or broad (such as Western Civilization). Topics may relate to a time period, a problem, or a concept. Some topics (such as Western Civilization) have been used more frequently. One topic—values—merits further discussion because of the recent surge of interest in ethical behavior and concepts. Usually described as a process of formation and clarification or as a method of analysis and examination (rather than the transmission of knowledge or skills), values education has received significant attention in recent curricular innovations. In the post-Watergate era, the inclusion of courses having to do with values is often seen as a way to redevelop the moral awareness and integrity that is fundamental to a democratic society. Unlike many other topics for integrating liberal education, the values issue presents major definitional problems (Wee in Mohrman 1978a, p. 1); although they often seem attractive in theory, values programs can be particularly difficult to implement.

The Integrated Studies Program at Pacific Lutheran University, "The Dynamics of Change," is an example of an optional, component-integrative curriculum. Implicit in the philosophy of the program is

a belief that understanding requires knowledge of how various fields interact and are interdependent. The program is based not on specific courses or professors, but on the interaction of various specialized fields working together. Literature, the arts, the sciences, history, philosophy, religion, and mathematics are integrated into four major themes relating to the present and the future and especially to the underlying theme of the program—change. The four major themes, each the basis for a two-course sequence, are the Idea of Progress, Human Responsibility, Word and World, and Limits to Growth. Students take the first sequence, any two of the next three, and a culminating seminar. The program, which is an alternative to a more traditional liberal education program, can be compressed into one year or extended to eight semesters.

The Integrated Studies Program originated in discussions of two unanimously agreed on curricular deficiencies: (1) "The humanities course requirements . . . were not interrelated by design or related to other areas of humanistic concern in the sciences," and (2) "teaching strategies were unprogressive and neglected areas of faculty attention or development" (Pacific Lutheran University, n.d., p. 1). Specialized training of faculty and protection of specialty domains were cited as two of the major reasons for the deficiencies. Pacific Lutheran's decision to deal with the consequences of faculty specialization echoes the Harvard Report's development of new, core-centered courses. Although their responses are different, the similarity of the stimulus is unmistakable.

Pacific Lutheran's Program is designed specifically to address the impact of change. The original proposal for the program emphasizes that:

> vitality and flexibility in subject matter and instruction is preserved to permit a course of study which is fully adaptable to the changing patterns of interest and expertise among students and faculty while still assuring that the pattern of alternation is appropriate to concerns for the human condition (Pacific Lutheran University, n.d., pp. 10-11).

This openness to environmental influence contradicts the essentialist idea that liberal education must be based on an unchanging body of knowledge, and it is an example of the trend toward existential definition in liberal education.

The Competence-Based Model. One of the difficulties in discussing liberal education curricula is the lack of a definition of a liberally educated person. While the Harvard Report confronts this issue di-

rectly, many commentators either evade or despair of answering the question. Competence-based models are anchored in the belief that not only can a liberally educated person be described, but also that such a description is an important tool for curricular design. Knott (1975) addresses this issue:

> A competence-based curriculum does not differ from other curricula in its goals. It differs in the assumption that the basic desired outcomes of an educational process can be stated in terms of defined and recognizable competences and all students can be held responsible for achieving these competences (p. 28).

The emphasis in the competence-based certification process is shifted from teachers to students. Rather than the traditional, time-constrained (both on the maximum and minimum sides) exposure to a subject with a passing grade assigned to the minimum performance level, competence-based programs provide the recognition of competences regardless of where they are achieved and without major time constraints. (Carnegie Foundation 1977, p. 125). Some competence-based programs rely on traditional course experiences to demonstrate acquisition of skills. Those that do, despite their similarity to traditional course arrangements, are different from more traditional programs in their emphasis on outcomes as the determinant of content.

The outcomes definition of content brings a particular emphasis to competence-based programs. Commenting on the emphasis placed on "concerete behaviors," Ewens describes the divergence from the traditional stress on "theoretic knowledge":

> Competence-based liberal education not only controverts traditional practice by its emphasis on the assessment of specified competences but it also controverts the traditional view of liberal education by its concern for behavior rather than for theoretic knowledge . . . whatever the role of theoretic knowledge in relation to competence, competence is understood to involve something more than such knowledge (Ewens in Grant and Associates 1979, pp. 173-174).

Ewens also notes the shift away from theory in the outcomes as in the process of liberal education. "Practical knowledge is equally valued; indeed, it is somewhat more equally valued than is theoretic knowledge" (p. 185). This shift toward more practical subject matter may be a necessary concomitant of the competence-based curriculum. It may also be a part of the general trend toward a less essentialist view of curricular content, a trend evident in both the distributive and integrative models.

Several competence-based programs at small private institutions,

such as Alverno College and Mars Hill, have received much attention in the literature. However, because of its comprehensiveness and size, the General Education Program at Brigham Young University (BYU) will be discussed here. Required of all students since 1976, the program services more than 20,000 participants per year. Over 115 separate evaluation options are offered in fields ranging from Plants and Civilization to Theories of Human Freedom, with descriptions of the elective evaluations covering 140 pages of the catalogue.

Students at BYU must pass a total of fifteen evaluations in three areas. The first covers basic skills in reading, writing, mathematics, and health education. The skills of analysis, comparison, and synthesis in arts and letters, social systems, and natural science are evaluated in the second area. The third area comprises advanced writing skills and an extra major skill. In addition to these three areas, the curriculum includes a breadth component, an advanced skill, and a depth-within-breadth component.

Students are encouraged to choose their own method for completing the general education requirements. Evaluations may include essays, demonstrations, portfolios, oral or written exams, or other accepted means of measurement. Flexibility is emphasized through a variety of student options for preparation, including individual work; group study with or without credit; specific courses; or workshops, labs, and computer-assisted instruction provided by a Learning Services Center. Although coursework may be directly relevant, it is not a necessary or a sufficient condition for passing an evaluation. The freedom students have, including the options of entering a reinforced or an honors track, implies an increase in student responsibility characteristic of competence-based programs.

Trends in Liberal Education Models

As demonstrated by the models discussed, there is a definite trend away from content-oriented definitions of liberal education and toward a framework emphasizing process and outcomes. The development and maintenance of the flexibility to meet new environmental demands and opportunities is a hallmark of most innovative programs. While it would be easy to dismiss this trend as a denial or weakening of the liberal tradition, it is perhaps more accurate to interpret the flexibility as a precursor of a new conception of liberal education. In their efforts to develop new models of liberal education, curricular designers are referencing their efforts to the changing environment. As a result, this is a period of unbridled diversity of innovation in liberal

education. This diversity, so well reflected in the anecdotal approach, is a result of a period of reaction against older forms rather than adherence to some distinctive plan for liberal education. The future of liberal education may very well be determined by the successes of new conceptions developed during the 1970's. Our task during the coming decade may involve the successful implementation and the critical, systematic evaluation of the new models for liberal education.

Liberal Education: The Unifying Ideals

"Unbridled diversity" succinctly characterizes the most recent rash of curricular proposals and schemes intended to revitalize, renew, or reinvigorate (depending on one's lexicon) liberal education. The cynical observer might note that the number and intensity of these grandiose proposals for "revitalization" increases in direct proportion to the declining number of majors in the humanities, the slackening of traditional curricular requirements in these disciplines, and the consumer push for marketable skills and career training. In a phrase, the humanities faculty member could be viewed as primarily concerned with protecting his own turf. A more ominous form of criticism simply shrugs off the decline of liberal education as both inevitable and necessary in a technological age desperately in need of trained specialists, well-coordinated planning, and efficient management. To complicate matters further, there is no consensus among the proponents of liberal education, with uneasy and questionable compromises occurring in the implementation of various integrative, distributive, and competence-based curricular schemes.

A sympathetic critic of liberal education might despair that the flurry of recent proposals has turned fanatical, in Santayana's sense of the word: the redoubling of effort when the original aim has been forgotten. Indeed, even casting aside those arguments either actively antagonistic or merely indifferent to the ideals and practice of liberal education, there is considerable reason to seriously investigate this charge of fanaticism. Have many of the "revitalization" proposals, in their narrow focus on curricular models and design, overlooked such human elements as student-teacher interaction, the dynamic tradition of liberal education, and the fundamentally ethical character of the educational enterprise, Has there been too much emphasis on "grand schemes" that describe course formats, evaluative procedures, and calendar structures but bear little relation to implementation and reveal a lack of clear conceptual understanding of the basis and need for change?

The concluding analysis and interpretations embrace the larger, pradigmatic issues that must be confronted in any serious discussion of liberal education. This chapter also analyzes two major components of the current education paradigm: *dualism,* a bifurcated

view of humanity and the universe, and *cognitive reason*, or scientism. The chapter concludes with several suggestions for the revitalization of liberal education.

The Liberal Education Paradigm

As noted earlier, the rise of the modern university—with its emphasis on social service, advanced research, and disciplinary specialization—has been accompanied by a decreasing emphasis on personal growth and encounter, general studies, and the ethical dimension of education. Heavily influenced by the German example, but adapted to the needs of a growing nation, the modern university initially had a purgative quality that cleared away the unhealthy vestiges of the classical curriculum. Yet it has now dominated higher education for nearly a century, and no new definitive model of liberal education stressing the goals of general understanding, ethical development, and personalized teaching in a contemporary, twentieth-century perspective has emerged. To some extent, the prolonged and ever increasing bewilderment over the role of liberal education is understandable, since there has been neither clear analysis of nor broad perspective on the existing, entrenched educational structure. The liberal arts have been declining, and while their contemporary struggle has often been eloquent, sometimes profound, no one has adequately diagnosed the causes for the decline. For the most part, the liberal arts have been treated blindly, usually with fresh applications of humanities courses and programs. These have been stop-gap measures, however, treating symptoms while largely ignoring the ultimate causes for the decline.

If the sixties was the decade of unprecedented student unrest and diversity, the seventies was the decade of curricular turmoil and experimentation. As poetically expressed by Grant and Riesman (1978), the "perpetual dream" of an ideal education has not faded. Critics from numerous fronts have, once again, cried out against the disintegration of broadly humanistic education into departmentalism, vocationalism, and professionalization; and in reaction such colleges as Hampshire, Evergreen, New College, and Kresge at Santa Cruz have implemented their versions of the dream—often with limited success. "Advanced skills," "human outcomes," "values awareness," and "personal development" have been among the key phrases guiding reform efforts. Yet, in the absence of definitive models of liberal education, attempts to reinvigorate liberal learning have been sporadic and difficult at best. To help illuminate the discussion of liberal education, it is essential to focus on the paradigmatic structure, composed of key

assumptions and understandings, that has dominated our modern view of higher learning.

Gradually, a more concrete awareness of this paradigmatic structure has begun to develop. What has begun as a "debate in the dark" is unfolding in the light of commentaries by such individuals as Botstein (1976, 1978, 1979), Hearn (1972, 1975), Morris (1978), and Murchland (1976, 1979). The structure has two fundamental components: *cognitive reason,* or scientism, and *dualism,* a bifurcated view of humanity and the universe. Liberal education is enmeshed within this epistemological scheme that has grown to incredible proportions, distorting other viable, alternative foundations—be they aesthetic and ethical, or political and social.

First, let us examine dualism. In an article discussing the "conceptual crisis" in higher education, Hearn writes, ". . . in pointing to the gap between the quest for knowledge and the growth of persons we are simply reporting the dominant perspective of the age" (1975, p. 8). In "The Cognitive and Affective in Liberal Education: Can We Have Both?" McDaniel (1976) claims we can, indeed, "have both," but we must first unite them. In a similar article, Mattfeld (1975) identifies what she views as a false dichotomy between the aesthetic/intuitive and the rational: and, 50 years ago in *The Aims of Education,* Whitehead proclaimed, "There can be no adequate technical education which is not liberal and no liberal education which is not technical" (1929, p. 48). Whitehead insists that education must impart both technique and intellectual vision and bridge the split between practice and theory.

The divisions between intellectual mastery and personal development, affective and cognitive, professional and liberal and, in a curricular context, between the sciences and the humanities, have been wide and seemingly unbroachable. Snow directly addressed this problem two decades ago in *The Two Cultures and the Scientific Revolution* (1959). In a broader context, Mumford (1952) expanded on the split between "art and technics" in his book by the same name; Bronowski has sought to illustrate the essential unity in scientific and artistic endeavors in numerous writings on the subject; and Barrett provides an intellectual vision of man struggling with his own dualistic conceptions of human nature and the universe in both *The Illusion of Technique* 1978) and *Irrational Man* (1958). This dualistic conception of reality has, even within disciplinary areas, led from discord to a total divorce and the near absence of dialogue between opposing schools. In philosophy, two of the major schools of thought,

analytic and existential, are often divided geographically as well as conceptually; in psychology there exists a radical split between the behaviorists and the humanists; and in the natural sciences there is not a clear separation between the fixed mechanism of the lower order of inquiry and the more fluid relativism and indeterminacy at the theoretical level. We are in an age that not only draws logical distinctions between reason and emotion, imagination, and creativity, between fact and value, and between theory and practice, but also seeks to separate them in educational practice. The holy triumverate has been Reason, Fact, and Theory standing, if not in opposition, certainly in superiority, to imagination, value, and practice.

As a result, the curricular proposals of the 1970's for change in liberal education have tended to over-emphasize value over fact, process over content, and the humanities over the sciences; and thus, they have remained embedded in a dualistic vision. The ongoing pleas for the humanities and "character education" (which goes under many other names as well) have been issued in reaction to the pervasive structure of theory, scientific method, and factual knowledge and its advancement. It is time, however, to step outside of this dichotomy, which continually stacks the jealous, struggling "forces" of art and imagination against the defensive but powerful "forces" of science and scientific method. As long as *cognitive rationality* is considered the major technique of our age, the humanities are destined to little more than pyrrhic victories in the war over the future of liberal education.

If dualistic forms have been the prevalent mode of understanding, cognitive rationality has been the dominant method or technique used to achieve that understanding. As Murchland writes, "Cognitive rationality has become codified in all the representative techniques of modern society" (1976, p. 24). In our view, cognitive reason is the trivialized, dogmatic travesty of the scientific method that opposes values in principle. The roots of this scientism lie in logical positivism and in the technological application of scientific findings. Such a conception of reason is far removed, of course, from the Greek-rooted vision identified in the first chapter. Hearn rightly contends that reason, so defined, ". . . excludes morality, art, politics and religion—in short, all those areas from which humankind has derived meaning and enrichment" (1975, p. 6).

In the face of such a one-sided "illusion" of technique, the humanities and cultural ideals have given way to the sciences and technological innovation. Yet science and technology themselves have also suffered from this emphasis. As Maslow (1970) writes:

> The development of physics, astronomy, mechanics, and chemistry was impossible until they had become value-free, value neutral, so that pure descriptiveness was possible. The great mistake that we are now learning about is that this model, developed from the study of objects and of things, has been illegitimately used for the study of human beings. It is a terrible technique. It has not worked. Most of the psychology on the positivistic, objectivistic, associationistic, value-free, value-neutral model of science, as it piles up like a coral reef of small facts about this and that, is certainly not false, but merely trivial (pp. 29-30).

Interestingly, the leading theoretical scientists of this century, especially the mathematicians and physicists, have rejected cognitive rationality as too stultifying and narrow a method within their own investigations into the nature of objects and things. Yet the social scientists, and often the humanists as well, have become so enraptured with the tidy, "value-free" objectivity of the natural sciences and mathematics, as well as with the multitude of concrete technological spinoffs, that they have blindly adopted scientism. In so doing these scholars and teachers have either ignored or rejected a broader conception of reason and inquiry. Rejecting this narrow scientism, Hearn (1975) contends that

> . . . we must somehow recover an enriched conception of reason which emphasizes our quest for beauty and goodness as well as truth. "Reason' will necessarily seem shallow so long as we are victimized by a narrow positivistic conception of knowledge and science. For in that guise, reason becomes the handmaiden of technology, the instrument of order, uniformity, and conformity in an age which recognizes the worth of spontaneity, creativity, and diversity. So long as reason is conceptually divorced from action, commitment and dedication to ideals, then rationality can appeal only to those who lack moral passion (pp. 11-12).

This "connected vision" rejects both dualism and scientism. Instead of knowledge in the humanities and society-as-culture becoming mere adjuncts or refinements (or, at worst, archaic, meaningless constructs) to scientific knowledge and the technological, bureaucratic society, the dramatized divisions between the two approaches can be softened. Their connectedness lies in what Bronowski (1965) refers to as "the creative act:"

> . . . there exists a single creative activity, which is displayed alike in the arts and in the sciences. It is wrong to think of science as a mechanical record of facts, and it is wrong to think of the arts as remote and private fancies. What makes each human, what makes them universal, is the stamp of the creative mind (p. 27).

In the same vein, Murchland (1976) forces us to reexamine the Greek ideal:

> The role of education in its classical conception was first of all to train citizens to a sense of their own selfhood and secondly to train them to consider reflectively the ideals most likely to give meaning and direction to their communal experience. But whether the emphasis was social or individual, education was in all cases radically pragmatic in the sense that it always envisioned the most enlightened ways of acting (p. 26).

Hearn (1975) also emphasizes a broad concept of human inquiry: ". . . if liberal education is not defined by content, but by habits of mind, there are no subjects which are as such illiberal" (p. 16).

Mumford (1952) reaches beyond the domain of education in his prescription for a unified view embracing both art and technics:

> . . . the problems we have inquired into within the special realms of art and technics are illustrative of much larger situations within a modern society; and that, therefore, we cannot solve these problems until we have achieved a philosophy that will be capable of re-orienting this society, displacing the machine and restoring man to the very center of the universe, as the interpreter and transformer of nature, as the creator of a significant and valuable life, which transcends both raw nature and his own biological self (p. 159).

Whatever the metaphor or language, the "connected" view arises out of a common struggle against both inhumane science and scientific humanism. The solution to the conceptual or paradigmatic crisis within higher education, and particularly liberal education, involves going beyond the traditional equations of objectivity with science, and subjectivity with arts. It lies in a mature, unified perspective that accepts both the sciences and the humanities as part of the creative human enterprise and rejects dogmatic adherence to technique and technological advancement.

A Vision of Liberal Education: The Future as History

The liberal arts face a clear challenge, as concisely expressed by Botstein:

> Today's version of the humanities and culture in general lends itself to [a] sanitized usage because implicit in the current idea of the liberal arts is the notion that they are essentially disinterested, free of political or social ideology. Educators have absorbed too great a respect for the scientific illusion of expertise to come out and state a decisive credo. We have no vision of the good society, the good life, the ideal citizen and person. We would all rather hide behind the liberal arts as mere

> technique, as teaching *how* to reason, to appreciate, to write, to read, no matter the underlying judgments and opinions. To be liberally educated in this view is to possess only skill (1979a, p. 17).

To all those who believe in the ideals of liberal education, a fundamental question must be raised: Can we, in a pluralistic society espousing higher education for all, avoid the sanitized, glib notion of skills development as well as the more traditional version that centers exclusively on content and accumulation of fact? The critics are almost unanimous in their rejection of the older heritage models that focused on Western culture through required, content-oriented courses. Yet, many remain dissatisfied with the excesses of competence-based models and uncomfortable with approaches that concentrate narrowly, and sometimes exclusively, on behavioral outcomes. On the other hand, the advocates of competence approaches see distributive and integrative models slipping far too easily back into the traditional paradigmatic structures. It is true that the distributive and integrative models have tended to concentrate heavily on the "humanities" prescription, failing to bring meaning and vitality to the whole of the liberal education enterprise—as competence-based models have attempted to do.

This conclusion, then, cannot simply call for renewed emphasis on the humanities. Rather, it is a plea to give new meaning to the liberal education curriculum in its entirety: science and humanities, liberal and professional. In our view, proposals for curricular change in higher education should be united in their reaction against the paradigmatic structure of scientism and dualistic understanding. There can be unity in the determination to avoid both antiseptic, narrowly skills-oriented education and the dutiful conformity and specialized triviality of disparate factual courses in humanistic disciplines. There can be unity in the recognition that liberal education, although packed in epistemological structures, is primarily an ethical enterprise. All liberal education, then, must serve the gadfly function, prodding the individual into a personal examination of the ultimate questions in life. And, finally, both the humanities and sciences need to illustrate the common elements in their inquiry: creativity, imagination, and reason. No area of inquiry can rest on traditional authority; each must seek to illustrate its relevance and importance as well as its essential commonality in the process of rational and creative inquiry to each generation.

The dominant feature of our age has been unswerving faith in a purely objective, inhumane form of reason, answered more and more

vehemently through the beliefs and actions of withdrawals and irrationality: stoicism, mysticism, and existential despair, to mention a few. A new synthesis must lie in a model of humane, practical reason. In more concrete terms, we need curricular models for liberal education that:

- avoid trivialization due to the overemphasis of skills and behavioral outcomes;
- personalize education through broaching divisions between theory and practice, learner and teacher, and facts and values;
- integrate the vocational with liberal studies not through weakening the ideals of liberal education but by strengthening our conception of vocation;
- allow more room for diversity in curricular practice and offerings through continuing focus on the unique traditions and mission of individual colleges;
- ensure that liberal education provides a forum where real-life issues and values are discussed freely and passionately. In short, creating an atmosphere where academic freedom can have real meaning; and
- shift the emphasis away from departmental and disciplinary structures at the undergraduate level, with more weight given to those ideals and theories that link personal development with intellectual growth.

As this monograph makes clear, liberal education is a dynamic tradition, capable of adapting to changing times and conditions. Yet there is much in the history of liberal education, particularly its Greek roots, that can illuminate our current confusion. Rather than narrowly focus all our attention on curricular trends and models, we must also confront the underlying paradigmatic issues—especially our emphasis on cognitive reason and a dualistic view of humanity and the universe—that shape our visions of liberal education. The future of liberal education depends on a commitment to confront the most difficult questions.

Bibliography

The ERIC Clearinghouse on Higher Education abstracts and indexes the current literature on higher education for the National Institute of Education's monthly bibliographic journal *Resources in Education (RIE)*. Most of these publications are available through the ERIC Document Reproduction Service (EDRS). Ordering number and price for publications cited in this bibliography that are available from EDRS have been included at the end of each citation. Readers who wish to order a publication should write to the ERIC Document Reproduction Service, Post Office Box 190, Arlington, Virginia 22210. When ordering, please specify the document number. Unless otherwise noted, documents are available in both microfiche (MF) and paper copy (PC).

Abelson, Paul. *The Seven Liberal Arts: A Study in Medieval Culture*. New York: Teachers College, Columbia University, 1906.

Anderson, Scarvia B. and Ball, Samuel. *The Profession and Practice of Program Evaluation*. San Francisco: Jossey-Bass, 1978.

Axelrod, Joseph. "Curricular Change: A Model for Analysis." *The Research Reporter* 3 (1968). University of California, Berkeley: Center for Research and Development in Higher Education. ED 030 355. MF-$0.98; PC-$2.96.

Barrett, William. *The Illusion of Technique: A Search for Meaning in a Technological Civilization*. Garden City, New York: Anchor, 1978.

———. *Irrational Man: A Study in Existential Philosophy*. Garden City, New York: Doubleday, 1958.

Belknap, Robert L., and Kuhns, Richard. *Tradition and Innovation: General Education and the Reintegration of the University*. New York: Columbia University Press, 1977.

Bell, Daniel. *The Reforming of General Education: The Columbia College Experience In Its National Setting*. New York: Anchor, 1968.

Bennett, John. "Liberal Education—Why?" *Liberal Education* 63 (March 1977): 67-79.

Bergquist, William H. "Eight Curricular Models." In *Developing the College Curriculum: A Handbook for Faculty and Administrators*, by Arthur Chickering, David Halliburton, William H. Bergquist, and Jack Lindquist. Washington, D.C.: Council for the Advancement of Small Colleges, 1977. ED 152 125. MF-$0.98; PC-Not available from EDRS.

Berry, Donald L. "The Liberal Arts as Attitude." *Journal of General Education* 29 (Fall 1977): 228-234.

Blackburn, Robert; Armstrong, Ellen; Conrad, Clifton; Didham, James; and McKune, Thomas. *Changing Practices in Undergraduate Education*. Berkeley: The Carnegie Council on Policy Studies in Higher Education, 1976. ED 130 575. MF-$0.98; PC-Not available from EDRS.

Blackman, Edward B. "General Education." In *Encyclopedia of Education Research,* edited by Robert L. Ebel. 4th edition. New York: Macmillan, 1969: 522-537.

Bledstein, Burton J. "Reassessing General Education." In *Relating Work and Education,* edited by Dyckman W. Vermilye. San Francisco: Jossey-Bass, 1977.

Bok, Derek C. "Can Ethics Be Taught." *Change* 8 (October 1976): 26-30.

———. "On the Purposes of Undergraduate Education." *Daedalus* 103 (Fall 1974): 159-172.

Botstein, Leon. "College Could Be Worth It . . ." *Change* 8 (December 1976): 24-29.

———. "Higher Learning." *The Center Magazine* 11 (March 1978): 32-39.

———. "Liberal Arts and the Core Curriculum." *The Chronicle of Higher Education* (July 9, 1979a): 17.

———. "A Proper Education." 258 *Harpers* (September 1979): 33-37.

Bouswma, William J. "Models of the Educated Man." *The American Scholar* 44 (Spring 1975): 195-212.

Bowen, Howard R. *Investment in Learning: The Individual and Social Value of American Higher Education.* San Francisco: Jossey-Bass, 1977.

Boyd, William. *The History of Western Education.* New York: Barnes and Noble, 1966.

Boyer, Ernest L., and Kaplan, Martin. *Educating for Survival.* New Rochelle, New York: Change Magazine Press, 1977.

Brick, Michael, and McGrath, Earl J. *Inonvations in Liberal Arts Colleges.* New York: Teachers College Press, Columbia University, 1969.

Brigham Young University, "Evaluating Competencies at BYU, *Evolution in Revolution,* A General Education Model." Brochure. Provo, Utah: Brigham Young University, no date.

———. "General Education Uniqueness." Mimeographed. Provo, Utah: Brigham Young University, March, 1977.

Bronowski, Jacob. *Science and Human Values.* New York: Harper and Row, 1965.

Brown, Robert D. *Student Development in Tomorrow's Higher Education: A Return to the Academy.* Washington, D.C. American Personnel and Guidance Association, 1972.

Brubacher, John S., and Rudy, Willis. *Higher Education in Transition: A History of American Colleges and Universities,* 1636-1976. 3rd rev. ed. New York: Harper and Row, 1976.

———. *On the Philosophy of Higher Education.* San Francisco: Jossey-Bass, 1977.

Callahan, Daniel. "Ethics and Value Education." *Liberal Education* 64 (May 1978): 134-143.

———, and Bok, Sissela. "The Role of Applied Ethics in Learning." *Change* 11 (September 1979): 23-28.

Carnegie Foundation for the Advancement of Teaching. *Missions of the College Curriculum.* San Francisco: Jossey-Bass, 1977.

Chamberlain, Philip, and Cangemi, Joseph P. "Is the Liberal Arts Spirit in American Higher Education Really Dead or Dying?" *Education* 95 (Spring 1975): 286-288.

Chance, Jerry M. "Emerging Patterns in General Education Curricula." Mimeographed. Tallahasee, Florida: Florida A&M University, 1980. HE 012 193 (June RIE). MF-$0.98; PC-$2.96.

Chase, Alton. "Skipping Through College—Reflections on the Decline of Liberal Arts Education." In *Toward the Restoration of the Liberal Arts Curriculum*. Working Papers—The Rockefeller Foundation. New York: The Rockefeller Foundation, June 1979. HE 012 332 (July RIE). MF-$0.98; PC-$9.32.

Cheit, Earl F. *The Useful Arts and the Liberal Tradition*. New York: McGraw-Hill, 1975.

Chickering, Arthur. "Developmental Change as a Major Outcome." In *Experiential Learning: Rationale, Characteristics, and Assessment*, by Morris T. Keeton and Associates. San Francisco: Jossey-Bass, 1976.

———. *Education and Identity*. San Francisco: Jossey-Bass, 1969.

Chickering, Arthur; Halliburton, David; Bergquist, William H.; and Lindquist, Jack. *Developing The College Curriculum: A Handbook for Faculty and Administrators*. Washington, D.C.: Council for the Advancement of Small Colleges, 1977. ED 152 125. MF-$0.98; PC-Not available from EDRS.

Conrad, Clifton F. "A Grounded Theory of Academic Change." *Sociology of Education* 51 (April 1978a): 101-112.

———. *The Undergraduate Curriculum: A Guide to Innovation and Reform*. Boulder, Colorado: Westview, 1978b.

———. "Initiating and Implementing Change." In *General Education: Issues and Resources*, The Project on General Education Models. Washington, D.C.: Association of American Colleges, 1980.

Coughlin, Bernard J. "New Modes in Liberal Education." *Liberal Education* 62 (December 1976): 585-598.

Cross, K. Patricia. *Accent on Learning: Improving Instruction and Reshaping the Curriculum*. San Francisco: Jossey-Bass, 1976.

Dewey, John. *Democracy and Education*. New York: The Free Press, 1967. Originally published in 1929.

Dressel, Paul L. *College and University Curriculum*. 2nd ed. Berkeley: McCutchan, 1971.

———. *Handbook of Academic Evaluation*. San Francisco: Jossey-Bass, 1976.

Dressel, Paul L., and DeLisle, Frances H. *Undergraduate Curriculum Trends*. Washington, D.C.: American Council on Education, 1969.

Drew, Lewis H. "The Greek Concept of Education and Its Implications for Today." *Liberal Education* 64 (October 1978): 302-319.

Earnest, Ernest. *Academic Procession: An Informal History of the American College 1636 to 1953*. Indianapolis: Bobbs-Merrill, 1953.

Ewens, Thomas. "Analyzing the Impact of Competence-Based Approaches on Liberal Education." In *On Competence: A Critical Analysis of Competence-Based Reforms in Higher Education*, by Gerald Grant and Associates. San Francisco: Jossey-Bass, 1979.

Foster, Susan L., and Burke, Armand. "The Fine Arts and General Education: Are They Compatible?" *Liberal Education* 64 (March 1978): 55-62.

Gaff, Jerry. "Concepts of General Education." In *General Education: Issues and Resources*, The Project on General Education Models. Washington, D.C.: Association of American Colleges, 1980.

Givens, Paul R. "Toward a New Emphasis on Human Values in Higher Education." *Liberal Education* 60 (December 1974): 409-417.

Grant, Gerald and Associates. *On Competence: A Critical Analysis of Competence-Based Reforms in Higher Education.* San Francisco: Jossey-Bass, 1979.

Grant, Gerald, and Riesman, David. *The Perpetual Dream: Reform and Experiment in The American College.* Chicago: University of Chicago Press, 1978.

Halliburton, David. "Curriculum Design." In *Developing The College Curriculum: A Handbook for Faculty and Administrators,* by Arthur W. Chickering, David Halliburton, William Bergquist, and Jack Lindquist. Washington, D.C.: Council for the Advancement of Small Colleges, 1977. ED 152 125. MF-$0.98; PC-Not available from EDRS.

Harvard Committee. *Report on The Core Curriculum.* Office of The Dean, Faculty of Arts and Sciences, Harvard University, February 15, 1978.

———. *General Education in a Free Society.* Cambridge, Massachusetts: Harvard University Press, 1945.

Haskins, Charles Homer. *The Rise of Universities.* Ithaca, New York: Cornell University Press, 1957.

Hearn, Thomas K. "The Conceptual Crisis in Higher Education." Paper presented in revised form to the Southeast Philosophy of Education Society. Birmingham, Alabama, February, 1975.

———. "Essentialism." Paper presented to the South Atlantic Philosophy of Education Society. Winston-Salem, North Carolina: Wake Forest University, 1972.

Heath, Douglas H. "Prescription for College Survival: Return to Liberally Educate Today's Youth." *Liberal Education* 63 (May 1977): 338-350.

———. "What do the Enduring Effects of Higher Education Tell Us About a Liberal Education." *Journal of Higher Education* 47 (March-April 1976): 173-190.

———. "What Is a Powerfully Liberating College." *College and University Journal* 12 (September 1973): 12-16.

Hefferlin, JB Lon. *Dynamics of Academic Reform.* San Francisco: Jossey-Bass, 1971.

Hirst, Paul H. *Knowledge and The Curriculum: A Collection of Philosophical Papers.* London: Routledge and Kegan Paul, 1974.

Hofstadter, Richard, and Smith, Wilson. *American Higher Education: A Documentary History.* Vols. 1 and 2. Chicago: The University of Chicago Press, 1961.

Hook, Sidney; Kurtz, Paul; and Todorovich, Miro. *The Philosophy of the Curriculum: The Need for General Education.* Buffalo, New York: Prometheus Books, 1975.

Hutchins, Robert Maynard. *The Higher Learning in America.* New Haven, Connecticut: Yale University Press, 1936.

Jaeger, Werner. *Paideia: The Ideals of Greek Culture.* New York: Oxford University Press, 1939.

Kaysen, Carl. "What Should Education Do?" *Daedalus* 103 (Fall 1974): 180-185.

——— et al. *Content and Context.* New York: McGraw-Hill, 1973.

Keeton, Morris T. and Associates. *Experiential Learning: Rationale, Characteristics, and Assessment*. San Francisco: Jossey-Bass, 1976.
Knott, Bob. "What Is a Competence-Based Curriculum in the Liberal Arts?" *Journal of Higher Education* 46 (January-February 1975): 25-40.
Kockelmans, Joseph, ed. *Interdisciplinarity and Higher Education*. University Park, Pennsylvania: The Pennsylvania State University Press, 1979.
Ladd, Dwight R. *Change in Educational Policy: Self-Studies in Selected Colleges and Universities*. New York: McGraw-Hill, 1970.
Levine, Arthur. *Handbook on Undergraduate Curriculum*. A report for the Carnegie Council on Policy Studies in Higher Education. San Francisco: Jossey-Bass, 1978.
Levine, Arthur and Weingart, John. *Reform of Undergraduate Education*. San Francisco: Jossey-Bass, 1973.
Lindquist, Jack. *Strategies For Change*. Berkeley: Pacific Soundings Press, 1978.
London, Herbert I. "The Politics of The Core Curriculum." *Change* 10 (September 1978): 11, 62.
Magill, Samuel H. "The Aims of Liberal Education in the Post-Modern World." *Liberal Education* 63 (October 1977): 435-442.
Maher, Thomas, ed. "Congratulation, But . . . ." *AAHE Bulletin* 31 (September 1978): 3-7.
Martorana, S. V. and Kuhns, Eileen. *Managing Academic Change*. San Francisco: Jossey-Bass, 1975.
Mattfeld, Jacquelyn Anderson. "Liberal Education in Contemporary American Society." *Daedalus* 103 (Fall 1974): 282-287.
———. "Toward a New Synthesis in Curricular Patterns of Undergraduate Education." *Liberal Education* 61 (December 1975): 531-39.
Mayhew, Lewis B. and Ford, Patrick J. *Changing the Curriculum*. San Francisco: Jossey-Bass, 1973.
Mayville, William V. *Interdisciplinarity: The Mutable Paradigm*. ERIC/Higher Education Research Report No. 9. Washington, D.C.: American Association for Higher Education, 1978. ED 167 043. MF-$0.98; PC-$7.77.
Maslow, Abraham. "Peak Experiences in Education and Art." *The Humanist* 30 (September-October 1970): 29-31.
McDaniel, Thomas R. "The Cognitive and Affective in Liberal Education: Can We Have Both?" *Liberal Education* 62 (October 1976): 465-471.
McGrath, Earl J. "Bring Back General Education." *Change* 4 (September 1972a): 8-9, 64.
———. *General Education and the Plight of Modern Man*. Indianapolis: Lilly Endowment, 1976.
———. *Prospect for Renewal: The Future of the Liberal Arts College*. San Francisco: Jossey-Bass, 1972b.
Meyerson, Martin. "Civilizing Education: Uniting Liberal and Professional Learning." *Daedalus* 103 (Fall 1974): 173-179.
Middleburg, Mauria I. "Moral Education and the Liberal Arts." *Educational Record* 57 (1977): 236-40.
Miller, Richard I. *The Assessment of College Performance*. San Francisco: Jossey-Bass, 1979.
Mohrman, Kathryn, ed. "Core Curriculum." *The Forum for Liberal Education*. Washington, D.C.: Association of American Colleges, October 1977. ED 165 645. MF-$0.98; PC-$2.96.

———. "Ethics and Values in the Curriculum." *The Forum for Liberal Education*. Washington, D.C.: Association of American Colleges, March 1978a.

———. "Liberal Education for Adults." *The Forum for Liberal Education*. Washington, D.C.: Association of American Colleges, October 1978b. ED 165 661. MF-$0.98; PC-$2.96.

———. "New Approaches to General Education." *The Forum for Liberal Education*. Washington, D.C.: Association of American Colleges, November 1978c. ED 165 660. MF-$0.98; PC-$2.96.

Monan, J. Donald, S.J. "Higher Education and Moral Choices in the 80s." *Liberal Education* 65 (Summer 1979): 266-271.

Morris, John S. "The Place of the Humanities in the Liberal Arts." *Liberal Education* 64 (March 1978): 44-54.

Mumford, Lewis. *Art and Technics*. New York: Columbia University Press, 1952.

Mumford, Lewis. *Interpretations and Forecasts: 1922-1972*. New York: Harcourt, Brace, and Jovanovich, 1979.

Murchland, Bernard. "The Eclipse of the Liberal Arts." *Change* 8 (November 1976): 22-26, 62.

———. "Reviving the Connected View." *Commonweal* 106 (February 2, 1979): 42-48.

Newman, John Henry. *The Idea of a University*. Garden City, New York: Image Books, 1959.

O'Connell, Barry. "Where Does Harvard Lead Us?" *Change* 10 (September 1978): 35-40, 61.

Pacific Lutheran University, "The Dynamics of Change, Core II, Integrated Studies." Brochure. Tacoma, Washington: Pacific Lutheran University, no date (a).

———. "A Program Grant Proposal: The Dynamics of Change." Mimeographed. Tacoma, Washington: Pacific Lutheran University, no date (b).

Perry, William G. *Forms of Intellectual and Ethical Development in the College Years: A Scheme*. New York: Holt, Rinehart, and Winston, 1968.

Peterson, Vance L., ed. *Renewing Higher Education: The Competency-Based Approach*. Toledo, Ohio: The Center for the Study of Higher Education, University of Toledo, 1976. ED 127 874. MF-$0.98; PC-$9.27.

Phenix, Philip H. *Realms of Meaning*. New York: McGraw-Hill, 1964.

Rice, James G. "General Education: Has Its Time Come Again?" *Journal of Higher Education* 43 (October 1972): 531-543.

Riesman, David, and Stadtman, Verne A., eds. *Academic Transformation: Seventeen Institutions Under Pressure*. New York: McGraw-Hill, 1973.

Rogers, Carl R. *Freedom to Learn*. Columbus, Ohio: Charles E. Merrill, 1969.

Romney, Leonard. *Measures of Institutional Goal Achievement*. Boulder, Colorado: National Center for Higher Education Management Systems, 1978. ED 158 656. MF-$0.98; PC-$5.96.

Rudloph, Frederick. *The American College and University*. New York: Vintage, 1962.

———. *Curriculum: A History of the American Undergraduate Course of Study Since 1636*. San Francisco: Jossey-Bass, 1977.

Rudy, Willis. *The Evolving Liberal Arts Curriculum: An Historical Review of Basic Themes*. New York: Teachers College, Columbia University, 1965.

Sandin, Robert T. "The New Clothes of Liberal Education." *New Directions for Higher Education* 5 (Autumn, 1977): 69-80.

Sawhill, John C. "The Unlettered University." *Harper's* 258 (February 1979): 35-40.

Schachner, Nathan. *The Medieval Universities.* New York: A. S. Barnes and Company, 1962.

Schiefelbein, Susan. "Confusion at Harvard: What Makes an 'Educated Man?'" *Saturday Review* 5 (April 1, 1978): 12-20.

Schmidt, George P. *The Liberal Arts College: A Chapter in American Cultural History.* New Brunswick, New Jersey: Rutgers University Press, 1957.

Schwab, Joseph J. *Science, Curriculum and Liberal Education.* Chicago: The University of Chicago Press, 1978.

Scully, Malcolm G. "Tightening the Curriculum: Enthusiasm, Dissent, and 'So What Else Is New?'" *The Chronicle of Higher Education* 16 (May 8, 1978): 1, 12.

Shulman, Carol Herrnstadt. "Revamping Core Curriculum." *ERIC/AAHE Research Currents.* Washington, D.C.: American Association of Higher Education, May 1979. ED 169 877. MF-$0.98; PC-$2.96.

Simmons, Adele. "Harvard Flunks a Test." *Harper's* 258 (March 1979): 20-27.

Snow, C. P. *The Two Cultures and the Scientific Revolution.* New York: Cambridge University Press, 1959.

Splete, Allen P. "Values and the Survival of the Liberal Arts College." *Liberal Education* 63 (March 1977): 118-125.

Thompson, Warren K. A. "Some Recurring Thoughts on Liberal Education." *Liberal Education* 62 (March 1976): 20-24.

Toombs, William. "The Application of Design-Based Curriculum Analysis to General Education." *Higher Education Review* 1 (Spring 1978): 18-29.

Travis, Thomas G.; Facione, Peter A.; and Litwin, James L. "Beyond The Core Curriculum: An Outcomes Approach to General Education." *Liberal Education* 64 (December 1978): 435-446.

Trivett, David A. *Competency Programs in Higher Education.* ERIC/Higher Education Research Report No. 7. Washington, D.C.: American Association for Higher Education, 1975. ED 118 023. MF-$0.98; PC-$5.96.

Trow, Martin. "Higher Education and Moral Development." *AAUP Bulletin* 61 (Spring 1976): 20-27.

"Value Added: Measuring the Outcomes of Undergraduate Education." A Study conducted by the Office of Instructional Research and Evaluation, Harvard University. Cambridge, Massachusetts: Harvard College, 1977.

Van Doren, Mark. *Liberal Education.* Boston: Beacon Press, 1959.

Veysey, Laurence R. *The Emergence of the American University.* Chicago: The University of Chicago, 1965.

Wegener, Charles. *Liberal Education and the Modern University.* Chicago: The University of Chicago Press, 1978.

Whitehead, Alfred North. *The Aims of Education.* New York: Macmillan Publishing Company, 1929.

Winter, David G., and McClelland, David C. "Thematic Analysis: An Empirically Derived Measure of the Effects of Liberal Arts Education." *Journal of Educational Psychology* 70 (February 1978): 8-16.

———; Stewart, Abigail J.; and McClelland, David C. "Grading the Effects of

A Liberal Arts Education." *Psychology Today* 12 (September 1978): 69-74, 106.

Wood, Lynn, and Davis, Barbara Gross. *Designing and Evaluating Higher Education Curricula.* ERIC/Higher Education Research Report No. 8. Washington, D.C.: American Association for Higher Education, 1978. ED 165 609. MF-$0.98; PC-$5.96.

Wyer, Jean. "Calendar and Degree Innovations." In *The Undergraduate Curriculum: A Guide to Innovation and Reform*, edited by Clifton F. Conrad. Boulder, Colorado: Westview, 1978.